

SEQUENCE LISTING

<110> Sun, Yongming  
Recipon, Herve  
Chen, Sei-Yu  
Liu, Chenghua

<120> Compositions and Methods Relating to Prostate Specific  
Genes and Proteins

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<151> 2000-11-01

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<170> PatentIn Ver. 2.1

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<212> DNA  
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<212> DNA  
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actcgggcat cagcgccacg tgctacggca gcggcgggccc catggagggg ccgcccggca 1200  
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aggagtgaga ggaaggcggg gggccacaa tcgcattgcgt gtggccctcc cctccacct 1500  
ccctgtgtat aaatatttac atgtgatgtc tggtctgaat gcacaaagcta agagagctt 1560  
aaaaaaaaaaaaaaa aaaaaaaaaatgg ttg 1583

<210> 33  
<211> 284  
<212> DNA  
<213> *Homo sapiens*

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<400> 33
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catctcttcc tcagggctgt ctattctgga gcttggtaaa accattttgt ttggaaagcaa 180
ttttaagaaa gaataatttt ttacataaaat ctgtggtcca ggaatactct ggcaggctca 240
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<210> 34  
<211> 429  
<212> DNA  
<213> Homo sapiens

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<400> 34
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ctgtggtagc acttcaagca gactaatatg tgtatttga atcctcggag gagagtggag 180
aggaagtatg tttcaagaag caatgaccaa aagtttcaaa ttgtatgaaa actatatact 240
cagagattt aagagttgaa tgaactctag gcagaagaaa cacgaaacaa actacataaa 300
agcacaaatct tcaatttccta caaactagta atagagaaga ttatgagaaa caatttaggg 360
aattttaaaa gccacattaa gtacaggggg agcaaaaata aaaatgcacag cagaggcngg 420
gtgcgggtgg 429
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<210> 35  
<211> 612  
<212> DNA  
<213> Homo sapiens

<400> 35  
ccggcccttt tttttcagt tacatTTAAT ttggggaata ggagataagt aacatTTagg 60  
gtccatattg gaggcgcgc caggccaggT cagcaatgtg gctgggcac ccagttgcc 120  
atgcctgccc ctctccgctc cttctctcat cttctctgca gtaaaagtca ggtgtttctc 180  
aaactctaAC ctgcacatga atcacacaga catctgttaa aatgcagact ctgagtcata 240  
ggtcttagAGT tgggcctgag attctgcatt tccaacaAGC ttctgagcaa taacagtgt 300  
tgggaccacg gaacataccc tgagcagtga ggtgctacag aaccccccAGC atctgtctc 360  
aacaAAccca aacagaatgg gcagagacag aggcattCTAG acttcaccag catatattca 420  
aattctgact acagggtatt ggtttaccac agaaccagAG aagaatAGca acacAAatcc 480  
tatacgatat cttaCGGTGA tatctatAGA ccccaAAatG gtttaggaggc aagtacaaaa 540  
ggctctgaaa ccccttacca atagccgata caatgttaact aaaactacta aatactctta 600  
taatattctg ga 612

<210> 36  
<211> 856  
<212> DNA  
<213> Homo sapiens

<400> 36  
cccaaATGCA acaacagaAT actcagaaAG ttgaagccAG taaagtgcct gagtatatta 60  
agaaaAGCTGC caaaaAGCA gcagaATTta atagcaACTT aaaccGGGAA cgcatggAA 120  
aaagaAGAGC ttattttGAC ttgcagacAC atgttatCCA ggtacCTCAA gggAAgttaca 180  
aagtTTTGCc aacagAGCgA acaaAGGTCA gttcttACCC agtggctCTC atccccGGAC 240  
agtTCCAGGA atattataAG agtatttagT agtTTtagTT acattgtATC ggctattGGT 300  
aaggGGTTTC agagCCTTT gtacttgCCT cctaaccATT ttggggtCTA tagatATCAC 360  
cgtaAGATAT cgtatAGGAT ttgtgttgCT attcttCTCT ggttCTGTGG taaaccaATA 420  
ccCTGTAGTC agaatttGAA tatatgtCTGG tgaagtCTAG atgcCTCTGT ctctGCCAT 480  
tctgtttGGG tttgttagAG acagatgCTG ggggttCTGT agcacCTCAC tgctcaggGT 540  
atgttCCGTG gtcccaAGCA ctgttattGC tcagaAGCTT gttggAAATG cagaatCTCA 600  
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ggagaggGGC aggcatGGGC aactgggtGC cccagccACA ttgctgacCT ggcctggCTG 780  
ctgctccat atggacccta aatgttactt atctcctatt ccccaAAAtTA aatgtAACTG 840  
aaaaaaaaaa gggcgg 856

<210> 37  
<211> 223  
<212> DNA  
<213> Homo sapiens

<400> 37  
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cctggggta gatttaaatt ggccttgtaa gctaataaaa aatgaagtct attctgaggg 120  
caatgtggag tcattgaaag gttcccagga aggaaaataa aaatccaaaa tcatgttata 180  
gaaaggtAAC tcagccgggc accgtggctc atgcctgtgg tcc 223

<210> 38  
<211> 256  
<212> DNA  
<213> Homo sapiens

<400> 38  
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aaaaagtcatt tcataatctt accactatta acatTTGAT gtatctatct gtatgtatgg 120  
ctattcttt ttggtaaaac atgatcctag cctatctaatt aatttaataa ttggatttta 180  
aaaatttaac cattatatta tggtaacct tacatgtcaa taaacaattt cacattgtca 240  
tgcttaaat ggctgc 256

<210> 39  
<211> 524  
<212> DNA  
<213> Homo sapiens

<400> 39  
catggctccc aagtgccgca gggccctgt tttcacagtc ccattcctccc acgtttctct 60  
tcagatggct tcatacgacc cagagctctt ctatacaaaag tgtgtatcatt cccagtggat 120  
ttcttcgctc catagctta tcattggaga tctgtttgat cctgacgttag cgctcaagaa 180  
agcactaaat ctgaaacgtt taaaaaccaa ttcacgtctc ctgagaacga tgggtataa 240  
cacaattttt ttctttcattt ttgatccccaa aagaagaaaa tcatgacaat attctttcat 300  
aaatccatta ttacactatt actatgacag gatattgtat gtgggaaata atgaagccat 360  
ttggcgtctc ttccccagtt tccttttagag tttctgtgtc gagcaaacct ccctgcgaag 420  
ttaatcagat gctggacttc ttccctcaat cacaccagtt gcccaggag agagacactt 480  
acaggacact ccattctgcc tattcaagta gtgccccttc tact 524

<210> 40  
<211> 536  
<212> DNA  
<213> Homo sapiens

<400> 40  
gctggacgag ggcattggctc ccaagtgcgg cagggccct gttttcacag tcccatcctc 60  
ccacgtttctt cttcagatgg cttcatagag cccagagctc ctctatacaa agtgtgtatca 120  
ttcccaagtgg atttcttcgc tccatagctt tatcattgga gatctgggtt atcctgacgt 180  
agcgctcaag aaagcactaa atctgaaacg tttaaaaacc aattcaagtc tcctgagaac 240

gatgttgtat aacacaattt tttctttcc tttgatccc aaaagaagaa aatcatgaca 300  
atattcttc ataaatccat tattacacta ttactatgac aggatattgt atgtggaaa 360  
taatgaagcc atttgcgc tcctccccag tttccttag agttctgtg ctgagcaaac 420  
ctccctgcga agttaatcag atgctggact tcctccctca atcacaccag ttgcccagg 480  
agagagacac ttacaggaca ctccctctg cctattcaag tagtgcctct tctact 536

<210> 41  
<211> 379  
<212> DNA  
<213> Homo sapiens

<400> 41  
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cggtcagat gctggagatg tcatttgcatt tgccagagtt tgccaagggt gcacacagaa 180  
agcagattga aaagcaccct cttgaacat ctcttcaatg cttctactc acaaagttt 240  
acatcattaa cacgtgacaa agaagaacta ttatggc ccagatctat ttatgaagac 300  
aatcaagtgg gagtttggag tggataaccc aaatttggat aactggtgaa taataaaatg 360  
tatttatttc tgctgggt 379

<210> 42  
<211> 1215  
<212> DNA  
<213> Homo sapiens

<400> 42  
tttggaaat ggatcaaatc acacttttag taaatgttat cactctatag cataagaaat 60  
aattatttt tatttatata aaaggctata gtataaaata tatgtatagt aattnaatga 120  
acacttgta acctaatagc catatgaaga aaataacatt tctaataatct ttggatgcc 180  
catgtactaa tgacagttat gctttgcatt tttcttgcatt tttatgttta tttatcttc 240  
ctctgtcatt atttataatt ttatcacaca tggctgtatc ctttacatgt tttggcatta 300  
tgtattttg aacttttgtt aaagacaatc ataccatgtg taattttcag ggacttgatt 360  
ttttcatttgcactttttaagg gttcaaatat attatcactg tggctgtatc ttggccattt 420  
ttgctgatatttgcactttttaagg gttcaaatat attatcactg tggctgtatc ttggccattt 480  
aaacatacag taatgtgaat agggaaatgtt aatatgaaga attattaatt gttacagcat 540  
tggacaatgcactttttaagg gttcaaatat attatcactg tggctgtatc ttggccattt 600  
cagatgtaaatgcactttttaagg gttcaaatat attatcactg tggctgtatc ttggccattt 660  
ctcacattgtt ggcctcgctc aaagttaaga agtcgtgtt gttttgcatt tggccattt 720  
gcttcaatttgcactttttaagg gttcaaatat attatcactg tggctgtatc ttggccattt 780  
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tcagatgtt gttcaaatat attatcactg tggctgtatc ttggccattt 1020  
gattgaaaatgcactttttaagg gttcaaatat attatcactg tggctgtatc ttggccattt 1080  
cattaacacg tgacaaatgcactttttaagg gttcaaatat attatcactg tggctgtatc ttggccattt 1140  
aagtgggatgtt gttcaaatat attatcactg tggctgtatc ttggccattt 1200

tat ttc tgct ggt gt

1215

<210> 43  
<211> 754  
<212> DNA  
<213> Homo sapiens

<400> 43  
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aagagacccc aaccgtcccc ttggcccccgt gccccggcg tttgcagttt gccaaaccttc 180  
tagctagaca gccccctaag tctccgtgtt gcgagtgaaa gagaattttt ctatttcata 240  
ttcccattga ccgaaggcaga aaaattgaac cgaatctacg ccccttggttc tgattcctgc 300  
tagagggaaaa cagaaaatca tcccgcaggt ctcttcagt ccctggatgg cgagcgcagc 360  
cctgggaggc cacacttagt tctttattgt gaatctctcg ctactcaagt tcgttcggga 420  
ccaggcctc ggatggcctc gggtgcccgt aagtacgcga aagaagaggt gaatccaatc 480  
gctggcctag aggatagtga tcagacaacc cgaggattac taaacaaggg gcggcggtgt 540  
ccctgtctca tgggggttggc gtggggcggg gggtaggcag caagatcctc caggctcctg 600  
gatgcaaaga gtgagaaaaga aagcgcagca tctggcagcc tgcttataaa tgcagccttt 660  
cggaagatga aacttgcagt cttaggttgt cctccttat atccatgttc caatcctctg 720  
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<210> 44  
<211> 955  
<212> DNA  
<213> Homo sapiens

<400> 44  
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gtccttctgg ggctcagaag ctgtgttgg tatgttctt ccaagaatcc cacctgtctg 240  
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gctaaacaaa gagacccaa ccgtccccctt ggccccctgc cccgcccgtt tgcagttgc 360  
caacccctca gctagacagc cccctaagtc tccgtgttgc gagtgaaaga gaattttct 420  
atttcatctt cccattgacc gaagcagaaa aattgaaccg aatctacgcc ccttggctcg 480  
attcctgcta gaggaaaaca gaaaatcatc ccgcaggctt cttagtgc ctggatggcg 540  
agcgcagccc ctgggaggcc acacttagt cttaattgtt aatctctcgc tactcaagtt 600  
cgttcgggac cagggcctcg gatggcctcg gttggccgtt agtacgcgaa agaagaggtg 660  
aatccaatcg ctggctaga ggatagtgtt cagacaaccc gaggattact aaacaagggg 720  
cgccgggtgc cctgtctcat ggggttggcg tggggcgggg ggtaggcagc aagatcctcc 780  
aggctcctgg atgcaaagag tgagaaaagaa agcgcagcat ctggcagcc tgcctataat 840  
gcagccttcc ggaagatgaa acttgcagtc ttaggttgc ctccttata tccatgttcc 900  
aatccctctgg gcttcctcg aatgaataa aattgtgaa atgaaaaaaaaaaaa 955

<210> 45  
<211> 503  
<212> DNA  
<213> Homo sapiens

<400> 45  
gatatgtatt aggcaaatacc ccacccacc cccatTTTG tctatagcac ttttagaatc 60  
atcttgcatttataatTTTaa aacagctggg atttagatttgc atactgcatttta gaatttacct 120  
atttatttgg gggagaatta tgccaaatga caatatttgatc tcttgccatc taggaatatg 180  
agatTTccc atTTTTTCC agtCTTTTttt atcacCTTta gaaaagctat attgtttct 240  
ttatataccatc cttgcacgtt attagttggg ttaattccaa gatgcataa tattatagct 300  
tttatgaatg gaatattttt cattgtatTTt tctaattgtt tgctggacta tatggaaatt 360  
gatTTTggc atgctgatataccagcaaa aaactttactt gaactctaattt gttttgttc 420  
tgagagggttt ctgatggtctt gtttcttgcg gggatgtctt aatcttccaa gtaaaaaatgn 480  
gtagactcctt atTTTCCttt gac 503

<210> 46  
<211> 206  
<212> DNA  
<213> Homo sapiens

<400> 46  
ggctgacaaa atactcacct ttacctttat tttgcatttataactcaca accatatttt 60  
tttggcccc cttccctta tttaactca taactgatac ttAAAGGTGc tctgccttat 120  
taaatcagct cctaggctgc aagtgcataa tatttaaaaa tttgcaactt tgactttta 180  
aaaatctggt ctggatggtgg agcaac 206

<210> 47  
<211> 394  
<212> DNA  
<213> Homo sapiens

<220>  
<221> unsure  
<222> (93)..(119)  
<223> a, c, g or t

<400> 47  
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tttcaactgct gtcttagtggg ggacaaatTA tannnnnnnn nnnnnnnnnn nnnnnnnnnna 120  
cagatgactg acaactgtta acttctcaact atgtGCCAGG gactatttgatc agttaactca 180  
cttaatcctc atagccaccc ttgaggtac ctataattat tctatagatg aagaagcaca 240  
gacagagagg ttaattaaga gcaagtgttgg gagtgaactt cctgatattt ccccTTAA 300  
gctgaagtcc atgacctgct tcccaattcc tggcagccac acagttgctc tgcnattttt 360  
cagtcttctta actttcaaca tagttacttt ttac 394

<210> 48  
<211> 135  
<212> DNA  
<213> Homo sapiens

<400> 48  
gtcacataac atttccggtg gccattaggg tgagcttaa gatctaactg gccaaggggg 60  
cttaagtaca atctttgatc agtaagtggc ttatgcctac ccagagacag cccctcagta 120  
gccaggctgt gaaag 135

<210> 49  
<211> 394  
<212> DNA  
<213> Homo sapiens

<400> 49  
gtaaccatca ctagtatgtg aggcttaaca cgacctctca tcatgactga acgacattca 60  
gtactctgat ccaggagcac ctccttaggtt gtcaggcttt aaaataaaat cacactcatc 120  
cctgacagtc tggcagaata tgtgcattgc caaggttata ccctctctgg actgagtgc 180  
gtatgaagat ccaactatta gtcctggctg aatggaaagc caaaatataa actccttcag 240  
ctttgatagc aatctgcaag tcacataaca ttccgggtt ccatttagggt gagctttaag 300  
atctaactgg ccaagggggc ttaagtacaa tctttgatca gtaagtggct tatgcctacc 360  
cagagacagc ccctcagtag ccaggctgtg aaag 394

<210> 50  
<211> 730  
<212> DNA  
<213> Homo sapiens

<400> 50  
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acaggaacag tgcctatggg tttaatttgt gcttagttgt tttgtttgc tccttcattt 120  
ttggctgaga aattaatgtt atttggaaat atctggagtt ccttttctt gaaaagggtca 180  
caaaccactg atttaaagag gatgactttg aaaatttagc tcacaatagt tgtgaaataa 240  
atgttagtagt actttgttagc ttaaattccg gtaaaattat cactttgtca ttttgatctc 300  
agaggagagc tattatttgt agcaaactac aaatataaac taacgtggaa ttccctgtgga 360  
tcaaggcatg atacatattt atatgtgtgt gtgtgttattc ttttctgaac caatatgaca 420  
ataagccatc tactctgaag tacagaggca gccatctatc attgactttat aaagctttga 480  
ccccagttagt agtgtgtgtt agaaggaata ccttgaacac ttccagatgtt agtcacccag 540  
cttagctgag tgggggccac catgccttgc tcaaaggcagg ttctccagtc agcaaacatc 600  
agtcaaggca gaatctatag gcagtgccctt ggaacacaga cgcatttcag atggtgagga 660  
aaaagcaagt gaagcacaca atttgaatct tggaaatata ctttgaatcc atggggttta 720  
gaagacacag 730

<210> 51  
<211> 953  
<212> DNA  
<213> Homo sapiens

<400> 51  
cgggacaaca ggaccctatg aaggtgggcc cacagcaaaa ggagagatga ttctagagca 60  
tccagtcttc tagggcagca aaacaaccta aattttctaa gaggccaccc agctgagggt 120  
gcccccgggg agggctgagg cgtcagggtg acggctccac tgcccactca cctgcgacct 180  
caaagccct ctcctccttg gggtgctcct gacagccacc tccagggcag gcgagtggcg 240  
ctgggacaaa ggctggccc actgcgcccc acccaagcag acggtccttc ccccagacct 300  
ggcgc当地 aac tggagtgaaa gcccgaccac cgtgtctcac agggaaactg acaccagatg 360  
cgaacttcca aatggatccc tccctgcaag tgtggagctg gcgc当地 accag 420  
ggccatgcgt ctaagacaca ggc当地 gagggc gctgcccacc acgctggcga cggc当地aaa 480  
gccc当地gttc atgc当地ggg cagc当地ccaa ggac当地tgc catgc当地ggg acaggccccca 540  
gggccccccac tggctgc当地t cagc当地ccgg cagggtggg ggggaaggta tggacactcc 600  
gtgggccc当地 gctgggagaa caaggccstat tattggacac ctggtggccca tggcaaccac 660  
acaaggatgc ctgagactga aaatctgtgg gttcaagga gctccagctc ttgc当地tggc 720  
· ttagt当地acag tgactatata actcttactc ccacttttg gacactttt gagagggaac 780  
aggatccta tctaactaca cgggacagac atc当地cccaag accgtc当地ta gcaaggc当地gg 840  
acgctgtgac cctaacgatg aaggtgtccc gcagacaatg tcc当地ggcag gc当地ccatgct 900  
ctcccaacctt accacagcca gatgttttg taaaacgat tga 953

<210> 52  
<211> 527  
<212> DNA  
<213> Homo sapiens

<220>  
<221> unsure  
<222> (224)..(365)  
<223> a, c, g or t

<400> 52  
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aagttaatag ggggtatgtt ttc当地tttagc aactgttatta tgtcttgagt atcaattgaa 120  
atggccagtt taaggccgtt atgtcttaat gggcaactat gctaacaata aaaaaagaac 180  
attgaggctt attaatactg ttc当地acaata tggtgggtt ttttnnnnnn nnnnnnnnnn 240  
nnnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 300  
nnnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 360  
nnnnntcacc aatttacttt aacaatgc当地 agagaaaagat ccattaacgt aagtgtttgg 420  
atgagttgaa catgtgaaat atagattatt aaagtattga atgc当地ttta gatgtgggtt 480  
atatatgggt tgtacttcat gaatattaag tctcccacag caaactg 527

<210> 53  
<211> 406

<212> DNA  
<213> Homo sapiens

<220>  
<221> unsure  
<222> (308)  
<223> a, c, g or t

<400> 53  
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ggtgagaaac agcaggatc caatattctg aaggatggca ttctggggtt gccttaggtta 120  
ctcagcagga tgcattatca cattatgcctt catattctt tggagtaagt aaaaatggc 180  
aagatgtgag acatgaaagt taagccttct gataagaaac ttgcacatc atcactataa 240  
tcaagaatgtt gaaaagattt atttacacat cacttttaa ttcattttac cagtaatgtt 300  
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agtctgggtt gaaaatatagg agatatacaa atggcgaggg tgtgg 406

<210> 54  
<211> 372  
<212> DNA  
<213> Homo sapiens

<220>  
<221> unsure  
<222> (293)  
<223> a, c, g or t

<220>  
<221> unsure  
<222> (304)  
<223> a, c, g or t

<220>  
<221> unsure  
<222> (367)  
<223> a, c, g or t

<400> 54  
gttcttaac acatttgtat tatcttcag taaaaagtat gtcttatgc ctacatattt 60  
caaagtaata tgagagagaa cattaaactg tggtgtattt tgataaaattt cttggaatct 120  
taaacatcat aatacctcag gttatttgtt cactgctttt gctagcaagg ctaagtagtt 180  
tcagtcctt agagctttat atttaatgga aggttaaaaaa caaaaacggg atgggaagga 240  
acgtatcgcc taatacataa ttcttgcatt tagatgattt ttccctgtaaa ggngctaata 300  
agnatattt ctcggattt attgtacattt atggattttg atatataactt agtaaagggtt 360  
aagtaangga ct 372

<210> 55  
<211> 537  
<212> DNA  
<213> *Homo sapiens*

<220>  
<221> unsure  
<222> (214)..(326)  
<223> a, c, g or t

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<400> 55
gcgtccgggc taaatgaaat atgaaaataac catactattg aatactatgc atcagctaaa 60
aatagcaaga gatctttgtt gagtgaaaaa ataaattgct gattgatcat taaatataac 120
actatgttt taagaagcct cagaaaacag taatatatga tcctataggc ataaaattat 180
ttatgatatac acacggaggt ctatagaatt tatnnnnnnn nnnnnnnnnn nnnnnnnnnn 240
nnnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 300
nnnnnnnnnnn nnnnnnnnnn nnnnnntagc aacatttcaa tggtggccag tctaattggag 360
agtgcagatc tagaagaaca aacacaactg gtaacagagt tacctggggg aaggttgagt 420
ttggggatgg agggctacag aaactttaga gttctgcaga acttttaaca ttttacaat 480
gagaatacat catatattat ctagctaatt taaaacaaat acattgttaa aatgaaa 537
```

<210> 56  
<211> 847  
<212> DNA  
<213> *Homo sapiens*

<400> 56  
caaaaataaa cttagacttt ttgaatttat tagctgttt tgcgtttt aattttagaa 60  
agctaaaaatt aaacactgaa agtaagttac tttattccat acggctcttg tccagttta 120  
gcactaaaaat cagttcaagg atgccaatcc ctaattgcc aatacgctt accattttg 180  
ttttcttc caaatttgtt ttttgctgg tcagataact tccaaatctct aaaatattcc 240  
tgaaaatgata aatttttatg atacagcata gaataatatg tatgtggaga cttgaaggag 300  
tcaaaatctca atgagcctt tgcgtttt aacgattgtt aaaagggggc caaaagggca 360  
ctaattttt gaaagtgtat gtttgttat ggtggtaat gtgttagagag ggtgaaaagt 420  
aaaggaaaag tagaacaaga agaaagaaaa ctgatagta tgacgatgag agagaaaagaa 480  
aatggaaaga gagcgcaga cgtcagatt tagaaaaaaat gttgagggaa acatattcaa 540  
aaggaaaaaa gaaagcagg ggaaaataca ttagagggtgt tgaaattagt aggcaactcac 600  
agaggtgcta atcgagagtt ctgttggct cctgtcatgc tgctttaaaa gagcatttagc 660  
agctaagaga tctaaattct agtcctagtt ctttgtgttg ccgtggagaa gtcagttaac 720  
ttacatgagg ctcaggttcc ttacctgtgt gtaaaatggg aacattgaac taggtgatct 780  
ttaagatccc ttccgggtct aaaattgttt gacattatct tgggtgtcag taactgtgag 840  
aaacaca 847

<210> 57  
<211> 1448  
<212> DNA

<213> Homo sapiens

<220>

<221> unsure

<222> (1420)

<223> a, c, g or t

<400> 57

caaaattaaa cttagacttt ttgaatttat tagctgttt tgtgaagatt aattttagaa 60  
agctaaaatt aaacactgaa agtaagttac tttattccat acggctctcg tccagttta 120  
gcactaaaat cagttcaagg atgccaatcc ctaattggcc aaatagcctt accattctg 180  
tttcttcata caaatttgtt ttttgctgg tcagataact tccaatctct aaaatattcc 240  
tgaaatgata aattttatg atacagcata gaataatatg tatgtggaga cttgaaggag 300  
tcaaatactca atgagcctt ttagggcatt aacgattgtt aaaagggggc caaaaggca 360  
ctaatttttgc gaaagtgtat gtttgtttat ggtggtaat gtgttagagag ggtgaaaagt 420  
aaaggaaaag tagaacaaga agaaagaaaa ctgataggta tgacgatgag agagaaagaa 480  
aatggaaaga gagcgaaga cgtcagatt tagaaaaaa gttgaggaa acatattcaa 540  
aaggaaaaaa gaaagcaggg ggaaaataca ttagaggtgt tgaaattagt aggcactcac 600  
agaggtgcta atcgagagtt ctgttggcct cctgtcatgc tgctattaaa ggcatttagc 660  
agctaagaga tctaaattct agtccttagtt ctttgtgtt ccgtggagaa gtcagttac 720  
ttacatgagg ctcaggttcc ttacctgtgt gtaaaatggg aacattgaac taggtgatct 780  
ttaagatccc ttccggctct aaaattgttt gacattatct tggtggtcag taactgtgag 840  
aaacacattc ctgagggaaa tttgcagcta tagttgactt caggacagca tggtaggaa 900  
gtagaatgta agctccctga gggtaggggc ctttctgtt gtgttcactg ccatatcccc 960  
agcagcttagc acaatgcgtg ttacatagta ggcattcatt aaatgtttgt tgaatgaatg 1020  
atgtgaaaag tatgttgatg gtttggtagg agcacaccta gaaagcctca aagaaaaatg 1080  
gtgtgcttta gggagggaaa agacagattt cttctgaaga aatcttaagc aagctgattt 1140  
ttaatcctta ttcttcctta ttttgcctca gattcaaaga aagtggcttc agctagtgac 1200  
attctcatag tcacaaaact tacgggtact gtagacatac ataaaagtgt acatgtatc 1260  
taggccagtt cccttaagt atcttacaga aaggcaggac caagcttagg tctccatgga 1320  
atctgagtga aaagtatata catgaaatat attagttata ttgaattaga ttgattggat 1380  
taaaattcat tcagttgaga ggcacagttt gtctacaagn ctgagataca ggctgccaaa 1440  
tttaagat 1448

<210> 58

<211> 354

<212> DNA

<213> Homo sapiens

<400> 58

acaagatta ggacaagtat tccaggttct gacttacttc cttggagcct ctccttgaag 60  
agctctgttt tctgaggacc gaggtaaaaa actgaggccc tcagccactg gggacatgaa 120  
atttcttggaa aaggaaaaat taagtcttgg gttgacttagc aaaacctgac ctttcaagc 180  
tctagctcta acatcttctt gtctctgagt tgctgctgaa agacaaaaat atgagagttt 240  
gggaccctt tctcactctc attctaatac agcagcagat attcatttatt aatgaaatat 300  
ataactatgt taatttaattt gatataggta ttgttccag gatattcatt taaa 354

<210> 59  
<211> 586  
<212> DNA  
<213> Homo sapiens

<400> 59

cactgcaa at gctactcgag gcagagagac ggaggagggtg gaatgtggcc tggccaca 60  
ttggccctt cggtttcca cagtgtctt cactggcctt cttgaaatcc agaaaacaag 120  
aga gctggaa aatattggtc tctgagttat agcacaggc agagaaggc agaaaatgca 180  
cctgaaagaa aacaggcaag tgacctatac accttctttt aggcccttc cctcttggt 240  
accgcata gca atattaagtg taaaatttatacataacactca ttgtatcacg tggctgtgtt 300  
ttgcttacat atccatctca acttttatct cttgcttcc ccagcaccag cactggcaca 360  
ttgcaatttt tgaacaaaag attttgaac taatgaataa ataggtgatt agatttaatt 420  
caatttcaat gaatgtttat taggtcatta ttagatatt gggtcagaat gttctagttg 480  
attctacata catcacctcc ttcatagagt atcctgaaag gcccacaatt cactcgac 540  
ttcttctcc taactgtcaa atttaccaa taaaaagta ttatca 586

<210> 60  
<211> 610  
<212> DNA  
<213> Homo sapiens

<400> 60

gtgtggagga gacgcacgac ctaccactgc aaatgctact cgaggcagag agacggagga 60  
ggtggaatgt ggcctgttcc cacattggc cttcggtt tccacagtgt ctgtctg 120  
ccttcgttcaatccaggaaa caagagact gaaaaatatt ggtctctgag ttatagcaca 180  
gggcagagaa gggcagaaaa tgcacctgaa agaaaacagg caagtgcact atataccttc 240  
ttttaggcct tctcccttctt gtgtaccgca tagcatatta agtgtaaaat tattataaca 300  
ctcattgtat cacgtggctg tgtttgctt acatatccat ctcaactttt atctcttgct 360  
ttccccagca ccagcactgg cacattgcaa ttttgaaca aaagattttt gaactaatga 420  
ataaataggt gattagattt aattcaattt caatgaatgt ttatttaggtc attatttagga 480  
tattgggtca gaatgttcta gttgattcta catacatcac ctccttcata gagtacctg 540  
aaaggcccac aattcactcg cacattctt ctcctaactg tcaaattttt ccaattaaaa 600  
agtattatca 610

<210> 61  
<211> 595  
<212> DNA  
<213> Homo sapiens

<400> 61

aggaaatcaa ttaattttct tgaaaactgg aacatgaaat aatcaaacat ttattctgcc 60  
ttccttataat gaactatact actgaatagc caaatagatg aggggaagta tcttttgta 120  
atagtattct aactaatcaa tttaaaatggaaaat ttcagttctt attaaatggaa 180  
tggacattaa acatcagtag ctactaagat tgcaaagtca gtcaaacattt agctatggat 240

gttatagatg tcccaaaggaa atcagtccctg aatttgattc agtctccctgg atcttagctgc 300  
ctatgacagg aaataaaagaa taacatgtng gattgcagca tgagtatgta atctgcaaaa 360  
tccagactat gggaaagcttg tcaggtcaaa gggcccaggt tctttaaagc agaacttgc 420  
agggaaatggg tggaggaagg accaatagat taagacattc aagaaatatac caattttta 480  
atggatgaga ctaaaaaact gtgttcaagg atgcacattt gagtgacaaa actctgaaaa 540  
gacccaagga agtgattact attaaagtca aaacaacagt tggttatggt aggag 595

<210> 62  
<211> 810  
<212> DNA  
<213> Homo sapiens

<220>  
<221> unsure  
<222> (329)  
<223> a, c, g or t

<220>  
<221> unsure  
<222> (691)..(752)  
<223> a, c, g or t

<400> 62  
agggaaatcaa ttaattttct tgaaaactgg aacatgaaat aatcaaacat ttattctgcc 60  
ttccttatat gaactatact actgaatagc caaatagatg agggaaagta tctttttgt 120  
atagtattct aactaatcaa ttaaaaagtg aaaataattt ttcagttctt attaaatgg 180  
tggacattaa acatcagtag ctactaagat tgcaaagtca gtcaaacatt agctatggat 240  
gttatagatg tcccaaaggaa atcagtccctg aatttgattc agtctccctgg atcttagctgc 300  
ctatgacagg aaataaaagaa taacatgtng gattgcagca tgagtatgta atctgcaaaa 360  
tccagactat gggaaagcttg tcaggtcaaa gggcccaggt tctttaaagc agaacttgc 420  
agggaaatggg tggaggaagg accaatagat taagacattc aagaaatatac caattttta 480  
atggatgaga ctaaaaaact gtgttcaagg atgcacattt gagtgacaaa actctgaaaa 540  
gacccaagga agtgattact attaaagtca aaacaacagt tggttatggt aggagggaaa 600  
agtattgtat aggcatgggt agtatcgac agtaaaata actcattaag ctaagtatat 660  
ttgtatttgt ttgctgtatc tgtttattt nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 720  
nnnnnnnnnnn nnnnnnnnnn nngccgagg tggctagat ctacctgttag 780  
gtcaggtagt tcgagaccta gcctggccat 810

<210> 63  
<211> 1215  
<212> DNA  
<213> Homo sapiens

<220>  
<221> unsure  
<222> (778)

<223> a, c, g or t

<220>

<221> unsure

<222> (801)

<223> a, c, g or t

<400> 63

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tattgcagat agttcacag gtcacagaac cttaaaaagg attaaagg catgtcttgt 120  
gtacatgg ttccttgaa aatgatgctc cttccatt ttttagtaat tgaagaggat 180  
agaaagggtt tctcattgct tacgttcac tgaattctc gcagcccctt ttccccacaga 240  
tgttcagcc aaacctgtat ggagggaggt gacatggcat ggcttgctgt taaaacagt 300  
tacggtattt tgtgcttccc ttttgagtgt gtccaagttg aacaaaagga gagcctctag 360  
aacgcattggg agggaaatt tgggaccagg acctttaca tgctgggaa aactgacagg 420  
actcagttag gaaagacttt tgttgtgtt ttctctctc tcttctctg cagagcgcat 480  
gatctatatac aacatgcttc ctggcatac taaagaatct cagctagtgg tgcatacca 540  
gttctgtga ggattattac tgtattaatg cattttggaa ggtgttgcatt cagttcagag 600  
tgaatgctt ggaagacatt gcacagctg aatcatggg catcaggat agttgactt 660  
ttcctgaagg atgtatggt gccatagact agttgggtt aagcttgcatt tctgttaagcc 720  
tggtatcaaa tgcacacatt aagccatgtt ttccataacag aatgaacatt ttttacannn 780  
nnnnnnnnnn nnnnnnnnnn ngctcagaac cttagaacag gatgatatac tcagaaagaa 840  
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attgcttcct cttgggttca ttgtacaatg gccttaattc aggtgacatt gcaagtacct 960  
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atattgtctg tggcaagat tttttgttt gtttccagag aacattatta atttcagatt 1140  
atattaaaga cttacatggc aggagactt cttctagata actaaaaaca ctgcgtagaa 1200  
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<210> 64

<211> 1841

<212> DNA

<213> Homo sapiens

<220>

<221> unsure

<222> (774)..(797)

<223> a, c, g or t

<400> 64

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tattgcagat agttcacag gtcacagaac cttaaaaagg attaaagg catgtcttgt 120  
gtacatgg ttccttgaa aatgatgctc cttccatt ttttagtaat tgaagaggat 180  
agaaagggtt tctcattgct tacgttcac tgaattctc gcagcccctt ttccccacaga 240  
tgttcagcc aaacctgtat ggagggaggt gacatggcat ggcttgctgt taaaacagc 300  
tacggtattt tgtgcttccc ttttgagtgt gtcaaggtga aacaaaaggag agcctctaga 360

acgcatggga gggaaattgg gacaggacct tttacatgct gggggaaact gacaggactc 420  
agtgaggaaa gactttgtt tgtgtttct tctctctt tctctgcaga gcgcataatgc 480  
tatataaca tcgttcctgg tcatactaaa gaatctcagc tagtggtat ctaccagttt 540  
ctgtgaggat tattactgta ttaatgcatt ttgggaggat ttcattcagt tcagagtgaa 600  
tgcttgaa gacattgcac agcttgaatc atggggcatc agggataatc tgactttcc 660  
tgaaggatgt atgggtggcca tagacttagt gggttggaaagc ttgcattctg taaggcttgt 720  
atcaaatacgca cacattaaggc catgtttcc tagcagaatg aacataaaa acannnnnnnn 780  
nnnnnnnnnnnnnnnnct cagaacctta gaacaggatg atatcatcag aaagaataag 840  
ggaaagtagg ccagaattag aaaacatcaa gatcattgga aaactgcata acttgcattt 900  
cttcctcctt ggttcattgt acaatggcct taattcaggat gacattgca gtacctttgg 960  
tgccctccag aaattaagcg catttggat tttgtgtgc gcttggggg cttctgtgc 1020  
agcagacaaa attgtgacat attattgcta aggagattga caactcataa gaataaatat 1080  
tgtctgtggg caagataaaa ttgtttgtt ccagagaaca ttattaaattt cagattatat 1140  
taaagactta catggcagga gactttcttc tagataacta aaaacactgc gttagaaagtt 1200  
atactatgtt tggccggggcg cggtggctca tgcctgcaat cccaaacactt tggggggcca 1260  
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atttcctca agtagcgcta gctgcaatgg ttacattgcc catgaaggac ctacctcagc 1440  
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tgtcagacca ggttattggg ggccaccgtg ctgtcacctt cctctgccaa gtccaggccc 1560  
actgtggggc ccgctgtcca ggcttagaaa ctccgtctcc cacaatttctt ccactaagat 1620  
gtggaaaatgg aagacttagca ggcaaggctg tggaaaccat ctgcgtcaact ggcatctggg 1680  
aaaagcaacc acccaggggca ggatgccacg ggacagggga gcataagcaa ctgaaaatga 1740  
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caggaatatt ccaagaatgt ggagtaacag gggacagctg g 1841

<210> 65  
<211> 257  
<212> DNA  
<213> Homo sapiens

<400> 65  
catgcctggc cttccacatg aaatttaaag tcagcttctc aatttctatt gttttgggttc 60  
taaaatagat gtaagggttt taaagtgagc aacaatctctt aggagccaga tttttgagtt 120  
ttctctccca aagctgcttt tcccttagtc ttctccatct tagtgaatgg caacttcact 180  
cttccagatg ctcacaccaa acaccctgaa atcacttttg attcttctc ttataccccca 240  
cattaaattt ctcagca 257

<210> 66  
<211> 327  
<212> DNA  
<213> Homo sapiens

<400> 66  
caggcagtga tgcgaggtga tctagaggat cccgataacc attatgtgcg tgatcatagg 60  
catgagccac catgcctggc cttccacatg aaatttaaag tcagcttctc aatttctatt 120

gttttggc taaaatagat gtaagggtt taaagttagc aacaatctct aggagccaga 180  
tttttgcgtt ttctctcccc aagctgcttt tcccctagtc ttctccatct tagtgaatgg 240  
caacttcact ctccagatg ctcacaccaa acaccctgaa atcaactcttg attcttctc 300  
ttatacccca cattaaattc ctcaqca 327

<210> 67  
<211> 487  
<212> DNA  
<213> *Homo sapiens*

<400> 67  
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cagaaaattca tctgagagca ggttacittc tcattgtaaa gtcacatgcaa gccagataaa 180  
cctatagggt agcacttcct taatttagttt acaatttctg aggataggtt ggtgggagta 240  
aactgcctct gagtggtcac ttctctggga actgtcccgt ctgttgttgt gtatcatatg 300  
ttcttagtgca tttttttca gttatgtcct ttccccacaaa gcagtttggt gtaaccactg 360  
taatcccagt aagctatggt tggggcttat gtataggaat gtgcaccctg aaattcattc 420  
acttatttcag cacaatttta tttgagcatc tactaagtgt tagggcactc tctgtggta 480  
qatastat . .487

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<210> 68  
<211> 1006  
<212> DNA  
<213> Homo sapiens
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<220>  
<221> unsure  
<222> (317)..(479)  
<223> a, c, q or t

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<400> 68
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ataaaaatata taagcatgt aaatatatgt aacatatata cttaaaatgc atatacatta 120
tatacattta actaagtaca aatataatg tgccctaagag gtaagctca aatggaaattg 180
agggaaataa gcttcaaatt catttctcat atattcatca ttttatttgt tcataatgtta 240
tggtttgtt gttgtgtatg ggagaggtac tgatttaggt tacttctttg tagtagagga 300
tggtagttaa aaatacnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 360
nnnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 420
nnnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnna 480
atataatgtg ttggatcagt gcttatgtgg aagcactagg taagtgttta ttattattac 540
ttctcattgt agtctccctt atgaaacgtg tgtgcatagc ctgtctggag gatgactttt 600
tgtctttaa agagagaagc tgtactactt ctactgtacc agaaaattcat ctgagagcag 660
gttactttct cattgtaaaag tccatgcaag ccagataaac ctataggta gcacttcctt 720
aattagtttcaatttctga ggataggtt gttggagat aactgcctctg agtgttcaact 780
tctctggaa ctgtcccgctc ttttttttttatcatatgt tctagtgtcat ttttttttcag 840
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ttatgtcctt tcccacaaag cagttgggt taaccactgt aatccagta agctatggtt 900  
gggtctatg tataggaatg tgacccctga aattcattca cttattcagc acaattttat 960  
ttgagcatct actaagtgtt agggcactct ctgtggtcag atatat 1006

<210> 69  
<211> 126  
<212> DNA  
<213> Homo sapiens

<220>  
<221> unsure  
<222> (70)  
<223> a, c, g or t

<400> 69  
cccctttact ttttataagt attgatacg ccctttcat gcctgaggta ttaatctgag 60  
tcttctcttn ttttttctt ggtcagtcta gctaaacagt tgccaatttg ttgatcttt 120  
ccaaga 126

<210> 70  
<211> 448  
<212> DNA  
<213> Homo sapiens

<220>  
<221> unsure  
<222> (364)  
<223> a, c, g or t

<220>  
<221> unsure  
<222> (377)  
<223> a, c, g or t

<400> 70  
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aaaaagagaa gactcagatt aatacctcag gcatggaaaa gggagcgaga ctctgtctca 120  
aaacaacaac aacaaaaaga tacaagcaa acaaatacg aaacgtatac aaaggattat 180  
acaccatgac caagtggat ttatcccagg aatacaaggt tggtttaata tttgaaaatc 240  
aatcgatgaa acacacaaaa ttgagagaat aaagatgaga agcttaatgt agggtaaaat 300  
gtctgaagct ctaagtgaaa ctgttgataa gctggggttt ctactctgg aacgctagag 360  
agnagagac acttagntac ttagtaacag caaaaagccc ggccaaaaag tagaactcaa 420  
gtgctttaga aactctgtgg gcaggggt 448

<210> 71

<211> 91  
<212> DNA  
<213> Homo sapiens

<400> 71  
ttcggtcgaa gtagggaaatt aggaatataag taactgccct tcataactgggt aatcttgata 60  
tgttgaagga agtgacttgt tataagatag a 91

<210> 72  
<211> 401  
<212> DNA  
<213> Homo sapiens

<400> 72  
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ggcctgcaga cactcagcta aagatgtctc ataggttgc cttgcagcta agtggggcca 120  
ttagactagg cttaaccag tgggctgaga gttaaagtga ttttgcatt tctgtttta 180  
ggaatggatg tgtctgcctg tggcagattt tattttcaa agatgaccac aaaaatatct 240  
cctatctcat gtgtgattct acagtggggt ctatgtcccc tcttcttcaa tgtgtgtgca 300  
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<210> 73  
<211> 422  
<212> DNA  
<213> Homo sapiens

<400> 73  
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ccttgcagct aagtggggcc atgagactag gcttaacca gtgggctgag agttaaagtg 180  
atttttgcca ttctgtttt aggaatggat gtgtctgcct gtggcagattt atattttca 240  
aagatgacca caaaaatatac tccttatctca tgtgtgattc tacagtgggg tctatgtccc 300  
ctttcttga atgtgtgtgc acttgtgact gcttgacta acagagtatg gggtaggatg 360  
ccatgtgact tctgaggctg gtcacggaa agcaattgtt ataagttaaat ttgcatgtcc 420  
cc 422

<210> 74  
<211> 471  
<212> DNA  
<213> Homo sapiens

<220>  
<221> unsure  
<222> (392)

<223> a, c, g or t

<220>

<221> unsure

<222> (459)

<223> a, c, g or t

<400> 74

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cagaaagtcc tgtttcacca gatcatgtt acagatagag tatgaggcat tgatccatga 180  
gaggacttca ttcaactaac cttaactgag cacctactgt atgcaatgca ccattccga 240  
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gacacctctc taagtgtgtg cccccctccc tagtctgtg acttacaatt cttttaaag 360  
ccattattat tctggagaac ccaaggattg cntcttctc agagctctaa tgtcaataac 420  
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<210> 75

<211> 214

<212> DNA

<213> Homo sapiens

<400> 75

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acaccttggaa gtttgttaag caggtcccct ctctgttagct tccaaagcca tgaagaagg 180  
gaaggaaggc caagacaggg gtagatagag gtgg 214

<210> 76

<211> 214

<212> DNA

<213> Homo sapiens

<400> 76

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ggccccggaa gggcttccgg catcttgggg ttccctcaa aggatggcct gggcaggact 180  
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<210> 77

<211> 552

<212> DNA

<213> Homo sapiens

<220>

<221> unsure  
<222> (273)..(357)  
<223> a, c, g or t

<210> 78  
<211> 452  
<212> DNA  
<213> *Homo sapiens*

<400> 78  
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cacacaaagc cccatttaga tattgtgagg cttagtgcata tttagaatctc agtagtgatg 180  
agtttaaaag gctaaggatg atggcaaagc tgattccaaac ttggggctaa atttttatttg 240  
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attttgattt gcttgcattt tctatacagg ctgtAACACT gccgcataaaa acacttaggg 360  
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ctttaactact cggttataaca aagagccgtc aa 452

<210> 79  
<211> 747  
<212> DNA  
<213> *Homo sapiens*

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<400> 79
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cgagcagctg ggattacaga tgcccaccaa gacactcagc caattttgt atttttagta 180
gagatggggc ttccaccatgt ttgtcaggct ggtcttgaac tcctgacctc aagtgatctg 240
cccacccctgg cctcccaagt gctgggatta cagggcatgag ccaccacgcc tggccttgac 300
ggctcttgt ataaccgagt agtaaaagttc cagggagttt cttcgagaac atctgtggac 360
tgcttgtaca gtcccccttg gcaagagccc ctatgtttt atgcggcagt gttacagcct 420
gtatagaaaa tgcagaagcaaa tcaaaaattga aaaggcattt gtgacctacc ataggtgact 480
ctcagggtcta attccataga agcaggacaa ataaaattta gccccaaagt ggaatcagct 540
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ttgccatcat ccttagcctt ttaaactcat cactactgag attctaaata ctgaaagcct 600  
cacaatatct aaatggggct ttgtgtgtt atattatgct taccacaatg cactacactt 660  
tcaatactga agggcctttt acaaagcatg tttagtattt agttgatgta aacaggttt 720  
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<210> 80  
<211> 353  
<212> DNA  
<213> *Homo sapiens*

<220>  
<221> unsure  
<222> (102)..(217)  
<223> a, c, q or t

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nnnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 180
nnnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnncct gtaaaatgt acagaagcat 240
gcattttga aacaagtaaa ggaagaagac ttaggcgtc tccactccaa ggnCACCTGC 300
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<210> 81  
<211> 627  
<212> DNA  
<213> *Homo sapiens*

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<400> 81
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cgtggtttcc agatctgtcc tagccacaga accctctttt caaacaagcc cttacctgca 180
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cggtgtcac tgggctccag gatgtgggtg gcagtgctg acttcccgt cctgcctgct 300
gtgggagacg agcttcttgc actggggcct gatttccag gctggcctct cagatcccgt 360
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caataaaaacg gagtttgtgg gatgttt 627
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<210> 82  
<211> 476  
<212> DNA  
<213> Homo sapiens
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<400> 82  
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gccttcttag aaggatacta gttgttgta tttaagggtg caccctaatac caacccatgg 300  
cactcaatca ttaacctaaa ttaacattct gacgaaggag tcctatttcc ataataaaagg 360  
tcaacactga ggtaactggg ttgaataatg gatatatggc catgtgtcct ccaaccccaa 420  
atactcaata catatgaaat atgtaactac tcaagaaaaat atacacacaa cagatg 476

<210> 83

<211> 387

<212> DNA

<213> Homo sapiens

<400> 83

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ttggcctcct tgctgcctct tggcatgcca agctctctcc tccctgcaga cttcattcct 180  
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ccactctgtc tttccatagt gtctgttgt actgcaagta tcttattttg tgtattttgtt 360  
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<210> 84

<211> 4270

<212> DNA

<213> Homo sapiens

<400> 84

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gttgcgtcagg ctggggaggg caccccaagg aaaaggcatc tttgctgaag cttgaatgtat 180  
gaagcatcta gaacagaagg aacagcagga atgaagtctg cagggaggag agagcttggc 240  
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gagaaagacg aggccaaag tcacagacca gGCCAGACCA GGCCGGGCCC tacaggccac 360  
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ctcctgctcg tgcctcagcc tccaagtata taggactaca gtggcgctc accatgccc 540  
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<210> 85

<211> 468

<212> DNA

<213> Homo sapiens

<400> 85

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<210> 86

<211> 508

<212> DNA

<213> Homo sapiens

<400> 86

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tctttaaaaa cattttcaaa agtttagttg aagtctgcct ggaaactgtc tggtaagat 360  
gatcaaggca atgaaaagga aactattaaa atctttaaaa tcttccttat tccaaatcca 420  
caactgttgta ttgtcatatt ggcttcattt aaacaagaaa ttttatttcat cagaagacct 480  
cactaagaga cagagagact gaaaaagg 508

<210> 87

<211> 868

<212> DNA

<213> Homo sapiens

<220>  
<221> unsure  
<222> (727)  
<223> a, c, g or t

<400> 87

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aagtccctaaa caacaccccg tattttgtca tggagtatacg aaagggagca gccagtgaag 180  
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<210> 88  
<211> 896  
<212> DNA  
<213> Homo sapiens

<220>  
<221> unsure  
<222> (755)  
<223> a, c, g or t

<400> 88

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aagccatgag caaagaggcg gtcagccctg caggtgatgc gggcaggtaa gaaaaggaca 300  
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gccacccctgg tttcacatt acctttaat tcacaccacg aggctgcctc ttaattccct 840  
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<210> 89  
<211> 229  
<212> DNA  
<213> Homo sapiens

<220>  
<221> unsure  
<222> (113)  
<223> a, c, g or t

<220>  
<221> unsure  
<222> (184)  
<223> a, c, g or t

<220>  
<221> unsure  
<222> (202)  
<223> a, c, g or t

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gaagttttta ggagttgata tttatggta agaaaatatga agttcaggca ttctttgaat 180  
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<210> 90  
<211> 234  
<212> DNA  
<213> Homo sapiens

<400> 90  
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ctagtctcag ttttggctca agccattacc agcactccca tcccccaacc ctaaaatgaa 180  
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<210> 91  
<211> 326  
<212> DNA  
<213> Homo sapiens

<400> 91  
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taagaagatg ccatgtctt tttccactag cacttcaat tttctaacc aataaaaatg 180  
ttatgtcttc tccaaggctg acctttacc ttctagtctc agttttggct caagccatta 240  
ccagcactcc catccccaa ccctaaaatg aaacttctct tctgtttgtt atttctcttc 300  
ctgacaatgg atcaacaaac atacat 326

<210> 92  
<211> 86  
<212> DNA  
<213> Homo sapiens

<400> 92  
acaggcgtga ccacccgtgc ctggcccacg ctgtccttaa ggagacactt tggcatac 60  
acagctgctc agcaaaaccc gacttc 86

<210> 93  
<211> 286  
<212> DNA  
<213> Homo sapiens

<400> 93  
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ggctatcctt tgtaattcta ttgcagtctt tgtgtaaatt tcaggttact tccaaattta 120  
aaaaaaaatt aagtgaacac atatattgac ccaaagttag acccattctg taacatgaaa 180  
atacaaggca aaaatataata taataacaact atgtaaaag accctttttt ctatcttacc 240  
taaaaacttaa catctccaat gattatccat taataagctc tttta 286

<210> 94  
<211> 455  
<212> DNA  
<213> Homo sapiens

<400> 94  
gataaaaagta atgtattgat gtaaatttac tgcagttgat aactgtatca tggttgtgta 60  
aagtattaat aatatcctca ttattgagaa atgcattttt aagtatttag aggtaaagaa 120  
gagtaatgta taaaattgaa atgattcaag aaaaatttgt gtatagaaag agcaaattgt 180  
aaaacaagca ggattaaacg ttaactgtgt gtcagtctaa gaggaacctg gctatcctt 240  
gtaattctat tgcagttttt gtgtaaattt caggttactt ccaaatttag aaaaaaatta 300  
agtgaacaca tatattgacc caaagttaga cccattctgt aacatgaaaa tacaaggcaa 360  
aaatatataat aataacaacta ttttttttttcccttttcc tatcttacct aaaacttaac 420  
atctccaatg attatccatt aataagctct tttta 455

<210> 95  
<211> 158  
<212> DNA  
<213> Homo sapiens

<400> 95  
ttttaataa acttttggt tgattacaac atgcatacg tacaagtcat aagggtgccg 60  
cttgcataaaa ttccacagtg accccagctg tgtaccgc atccagatca acaagcggga 120  
ttacaggcgt gggccactgc gcctggcaaa ttgagcac 158

<210> 96  
<211> 262  
<212> DNA  
<213> Homo sapiens

<400> 96  
gttttctgt gatgtgtacc taggaatgga agtgctgagc tctgtgtata cggcccttcc 60  
tcatggttct aactactaga gctttatagt aagtcttggt atgtggtaag acatgccctt 120  
cctccctctt ttcaaagtgt ccccaaaagg ctatacctag gtctttattc ttccttaaga 180  
attttcaac tgcatttagat gttgccacct tatcttccaa agctgttgtt gcagtttgtc 240  
tttctcccag tgatatataa ga 262

<210> 97  
<211> 87  
<212> DNA  
<213> Homo sapiens

<400> 97  
atgagaaacg tacaaagaaa attttataat aagcgagttc agcaagggttcaagataaaa 60  
gataaggcata taaatagcag ttgtatt 87

<210> 98  
<211> 230  
<212> DNA  
<213> Homo sapiens

<400> 98  
gttcaggata aaagctttag ggctgattct ccctcatggc acacattcac tggcatctg 60  
ctcttggca ggcctgtta taggtctgg actgaaacg taaggcctgg tagtgtgact 120  
accggaaata atcaggaaag gcatcaccaa ggcagcagta gctgtgtgt gatcaaagaa 180  
tgcacaggc ttgttagctac aggagagaga gaacagtggc aattccaggc 230

<210> 99  
<211> 144

<212> DNA  
<213> Homo sapiens

<400> 99  
gccttcattt ctagtgagc attcccaggc caaatttagt gaagggtctc atttcctagg 60  
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gttcaagga gcgagtagtt gaat 144

<210> 100  
<211> 469  
<212> DNA  
<213> Homo sapiens

<400> 100  
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aatcgtagcc taggctgcta gtcttacat gcacagtgt gtttagatgt gtgcttaatt 120  
ctcacagaag ccctacgggg caggcattcc cgtttacag atgtggaaac aaactatgag 180  
ggtaagaatt tggccagggt ttcacagcta ggatatggag ttgctggat ctgaccgcag 240  
tcctgttcc ttccctaattcc attggctgcc caccaggctg ccccacgggg tgtccctggg 300  
cagtcgctta tctatactat ctaccttac atacgttcat tggctggctg aggtgagttac 360  
actaggactt gactggaaaa ttttacaaac caagaaagca agggattctg ttccctcatac 420  
ctcctagctt tctgtctcctt agggaaagag aaanattaca aagaagaaa 469

<210> 101  
<211> 200  
<212> DNA  
<213> Homo sapiens

<400> 101  
ggatgaatg gcagacttta actggatgct ttathtagc ttttcgaaag caaaaaaaagt 60  
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tcctgttatt ttaacatttt aaatatttca taattgaaaa agggaaaaatt agactggac 180  
cagttatag aaagctttaa 200

<210> 102  
<211> 461  
<212> DNA  
<213> Homo sapiens

<220>  
<221> unsure  
<222> (145)..(170)  
<223> a, c, g or t

<220>

<221> unsure  
<222> (435)  
<223> a, c, g or t

<220>  
<221> unsure  
<222> (444)  
<223> a, c, g or t

<400> 102  
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gatcaatatg tactggatc aagtacatat tggaagctga ttctgtaaat taagatatac 120  
atggtaagcc ctagagtaac ccctnnnnnn nnnnnnnnnn nnnnnnnnnn acctcaaaaa 180  
acatagttagataaatt taaattcttc attaggaaat atttacttaa tgcagaagaa 240  
agcagtaagg gaggaataga agaacagaaa aatacatgag acacagtaaa cccaaagtaa 300  
aatgacagct ataaatccaa cttatatcaa acataacatt aaatgtgaat ggattaagga 360  
atctgatcag aatgcagaga ttgtcagatg gattaaaata atncaataag gtccaaactat 420  
acactgtctg taggnacac atgnntagacg tgatgtttat a 461

<210> 103  
<211> 319  
<212> DNA  
<213> Homo sapiens

<400> 103  
gctgcctta aggaacatga caaggatctg ttgtaagatc cacttcctaa agtgcttaaa 60  
gaaagaaatg gaaatctcaa gctaaggctc cgagtcactg tgagggagac tttccccctc 120  
cagtctattc tgttagtaaca gaataaaattt caaaataattt attttccta attataaata 180  
gaagtaatat cagctaattt tttaaagttt ggtaaatattt ttttaatgt gaaaaaattc 240  
ctctaatttc actccttaaaa ctcccttaac aatttggta tctccagcct aggcaacaag 300  
agtggaaactc tgccacaca 319

<210> 104  
<211> 563  
<212> DNA  
<213> Homo sapiens

<400> 104  
tattaattaa gtactcgcta agtgctaacc accataccaa atgttgaaa tgttagtaatg 60  
agttaggacat gtgttatatgg tccatacacctg aaagaagtt attctagtag gagaggtgat 120  
ctatcaacac ataattacaa catgtgatat gagctatgaa cactttagaa caaacaggg 180  
gctgtgtaaa agaataaagg aacaaagatc tgtgtatagg agtttctgg aaaatgtttg 240  
gatcggcag tcatttcaa aggtaggg cattgatagc agtatcttaa catggaaaac 300  
ataaaaacta actagatatt agtattctat ttccaaattca aaaataacca gaagatagtg 360  
atgttgaaaa gaatatacca ttccaaattt cagtgatata aaaaactgcc tgtttaata 420  
taattgaaaa tatacatcaa attataattt cagtgatata aaaaactgcc tgtttaata 480

tgtccttct ttgctgtaaa ttttggttaa aatctattgg agttacgtcc ttgtggtaa 540  
gtacacccta cccccaagag agc 563

<210> 105  
<211> 1041  
<212> DNA  
<213> Homo sapiens

<220>  
<221> unsure  
<222> (140)..(229)  
<223> a, c, g or t

<400> 105  
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tctcagaaaa taaaacttga ataataatag aaaacaattt ttcatataaa aaattatact 120  
taagtataaa aatgtatacn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 180  
nnnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnnt gtgtatatgg 240  
tccgtacctg aaaggaagtt attctatgt gagaagggtat ctatcaacac ataattacaa 300  
catgtgatat gagctgtgaa cacttatgaa caaacagggt gctgtgtaaa agaataaaagg 360  
aacaagatc tatgtatagg agttttctgg aaaatgtttg gattcggcag tcattttcaa 420  
aggcagaggg cattgatagc agtatcttaa catgaaaac attaaaacta actagatatt 480  
agtattctat ttccaattca aaaataacca gaagatagt gatgtgtttt gaatatagg 540  
tgtcaatctt tgtgttaata atgtgtttt gaaaagcaag acttaattga aaatatacat 600  
caaattataa tttcagtgtt ttaaaaaact gcctgtttaa atatgtcctt tctttgctgt 660  
aaattttgtt taaaatctat tggagttatg tccttgtgtt gaagtacacc ctaccccaa 720  
gagagcaaat gatgaataaa tcagtagatg ttccatgaat gcaatgttgg ctgagctggc 780  
cacagtggag tgtgatcacc tggttatagg agaatacgca gcaggttata tttcataatt 840  
atattttcc ttaaattttt gcattaatat ttaatagcaa taattaaatg aattccagac 900  
tgaatagaca atttttattca ttgaataaac attgagaatt gcctactgag gcctgggctc 960  
tagaattcc accaagaata aaaaaagaca tgggttttgc ccctcaaatt gcttagaattc 1020  
tattcaggcc acttagtagc a 1041

<210> 106  
<211> 451  
<212> DNA  
<213> Homo sapiens

<400> 106  
tggcaaatat gttttaaaa tggagaggtg tgcaggaaat gagccagcaa ggaaggagaa 60  
tataagtctgt cttttttgcg ggtatgcacaa ttgggtttat ttgcagactg atgtgttacc 120  
ttctaaagga ctgccacaa cgtttgcacc tcaatctaag gtcaacactg ctatccattg 180  
ctcacagaccc agagtgcattc tcccatgagg caaaagagca ggtgtgagaa gtgggtaaagc 240  
agtctgtata ttgggggtgt ggtggatggc ataggggata actcagtcata atgaaagaca 300  
tcaatgtgcc attgggaaag gacagaggtt gccccctt tcccccaagat agtcgcccag 360  
cttataaaatg catagatctg ggacagagaa taagggtcac cttagttccc cctaattcaca 420

ggcgggacta ggactttgg agatgtctca c

451

<210> 107  
<211> 103  
<212> DNA  
<213> Homo sapiens

<400> 107  
atcttggcg gtctgaaatc tgagatactg tggaaagaac agaaagatcc tgtatcttc 60  
ctataattgt tctactggaa gttgtcatt tacacaggag aca 103

<210> 108  
<211> 979  
<212> DNA  
<213> Homo sapiens

<400> 108  
agcggggggc ggcctggac tcggggcg ggtcagtcat ataaggctgt gcccagcgct 60  
tttggaaagca gtaagtccag cccgaggcta aggaggttt aaccaccgaa ggggggtaga 120  
atgttttcc ccaccagagg aggtagcgac cacgtctct ctatggaggc attcaagagc 180  
cgtccagctg aagcagcatc actgtctgag ctgcgaaggc acaatccaca taggtctgca 240  
tggccacag agctgcatac ccacggggcc agcgggaggt gggcagctgc cgggctctct 300  
tctgaagcag acaggatctc actctgttgc tgaggctgga tcacagotcc ctgcaacctt 360  
gaactctccc tcaagcaatt ctccccactc tgccttccaa agcaactagca ttataggcct 420  
aagccaccac tcccatccac ttagtgtaa actgtctct tcaatgttgc caatagttgc 480  
ggagcagatc agataagggt tcttcctgtc tggcgttca agttcattt tctctttaaa 540  
caatacaagg ttggcttcca tggttccttc ttaaagaatg ttgaagggtgt gtcttcagat 600  
tcatttagt ttcgtgaaac cccagggaaa gctgatgtaa aaacctcttt tttctcccat 660  
atgtctcaa aagttgtatt ttctgggtcc aaggatctg caagcctctt aaaggcattt 720  
ccattgtcac taccaccagg tggactgt aatctggcac gtatagttcc aagaactgtc 780  
ataatagatg ctgaagaaac attgtgaagt taactcgctg ttaccaactg tgaagtcatt 840  
agctagagga atcttggcg gtctgaaatc tgagatactg tggaaagaac agaaagatcc 900  
tgtatcttc ctataattgt tctactggaa gttgtcattt tacacaggag acattctgtt 960  
ttatttattt tctttttag 979

<210> 109  
<211> 668  
<212> DNA  
<213> Homo sapiens

<220>  
<221> unsure  
<222> (583)  
<223> a, c, g or t

<400> 109  
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gagtttgat ataagattat tatttaatga ataatcataa catagaaaaa catatcaaaa 120  
catagggaaa accaacataa atagtcttca aaagacacta gttcttggta tattcacata 180  
accaccttg tgaatgcagc acattaatac atctgtcata tagcacttta aaatggccaa 240  
cttttaagt gctttatac tgtattctc ccacaatgtat gtgacttcc aaaatttcc 300  
actgaaaaag atgtaacattt gcaatgttgtt ttagtatgga acttactttt cactgtatct 360  
ggcggttgaa ttttgcctt attgtactgt ggacttgtga ctaaggccaa taaaacttaa 420  
gctcaactaa tttaaatatac tcaaaaataac atttaggaaa aggtgcagtt ttttttgct 480  
tcagaatggg tttttatcac aaaggaatgaa gtgagacatt tatttgcgtt gggacttctg 540  
cacagtcatt gaatgctgtg agtgaatgtt aagtaaaaat tcntggtcaa gggaaaaacc 600  
aaggttcct ttccagggat aattcctacc caaattaccc acctggaaag gggaggaatg 660  
gccgagcc 668

<210> 110  
<211> 1112  
<212> DNA  
<213> Homo sapiens

<220>  
<221> unsure  
<222> (17)  
<223> a, c, g or t

<220>  
<221> unsure  
<222> (27)  
<223> a, c, g or t

<220>  
<221> unsure  
<222> (59)  
<223> a, c, g or t

<220>  
<221> unsure  
<222> (1027)  
<223> a, c, g or t

<400> 110  
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aattaagacc ttgattgagc tgcagtaccc ttaaaaagga ttagaagagc tattgaatgaa 120  
cttaatttat tagaagttt taagtgcacag catttctaattt tattcaagtgcattttt 180  
tcatgaaaaa aggtagaatg atttgcgttgc acataaaatgaa aatagtgttgc atgcatttgc 240  
aattgtgtgtt cttgattatg atttctgtac tttttgcattt agaagtataa tggacttgc 300  
tttttaataa gttgaaacta gcactgtgtat catattaaat aatgcatttc tcagtttgc 360  
cttcagatag ggattcattt gttgatattt tctttcttct cttccctgc aacataaaaca 420

/

cttttctgaa gcatatagtt atgatatacg ccttaaggt ttattgtccc acaatggctg 480  
tggagttaaa aaaaaaaatt cagttagtt ggatataaga ttattattta atgaataatc 540  
ataaacatagg aaaacatatac aaaacatagg gaaaaccaac ataaataatgc ttcaaaaagac 600  
actagttctt ggtatattca cataaccacc tttgtgaatg cagcacatta atacatctgt 660  
catatagcac tttaaaatgg ccaactttt aagtgcctt atactgtatt ctctccacaa 720  
tgatgtgact ttccaaaatt ttccactgaa aaagatgtaa ccttgcaatg tggtttagta 780  
tggaacttac tttgcactgt atctggcgt tgaatttgc ttttattgtat ctgtggactt 840  
gtgactaagg caaataaaaac ttaagctcac ttaatttaaa tatctcaaaa taacatttag 900  
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catttatttg tgctggact tctgcacagt cattgaatgc tgtgagtgaa tgttaagtga 1020  
aaattcntgg tcaaggggaa aaccaagggtt tccttccag ggataattcc tacccaaatt 1080  
acctacctgg aaaggggagg aatggccgag cc 1112

L  
E  
G  
E  
D  
E  
B  
E  
S  
H  

<210> 111  
<211> 1041  
<212> DNA  
<213> Homo sapiens

<220>  
<221> unsure  
<222> (944)  
<223> a, c, g or t

<220>  
<221> unsure  
<222> (946)  
<223> a, c, g or t

<220>  
<221> unsure  
<222> (976)  
<223> a, c, g or t

<400> 111  
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tttttgtca atttgacttc agatgttaat aaaacaaatc agaaaaaact aaggtgtata 180  
tttccaactg tggcttgctt catcatttgt gagactatgt catacatttc tactttttaga 240  
cataacagaa gcagagagat tatactcaa gctaataatga ggtttttaaa atcgtattat 300  
atattcagcc tcagccagca tatttttg gtggaggggt gggtacagat gattcaatat 360  
tgttagtaatg tttgcttctg aattttttt cttagttatt tgtctggat gggatcatgt 420  
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caataatgtat acatcttata atcagtgggt tcttagagtt gatgaattat ggtatttgcc 900  
taaagaattt ttataaggat taaaatgtat tattcaagtg cttntnttc actatggcat 960  
ataaaagaggg cagggnctgg aaaatgctca ggtgcatttc agtttgagc ttataaaaact 1020  
ggtagataa catgactagt g 1041

<210> 112  
<211> 1380  
<212> DNA  
<213> Homo sapiens

<400> 112  
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atgttacagg tgtggtcca cagagcacga aataaccaag tgtaaggcta aagtagaccc 180  
ggctcttggc gaatttcctt ttgcaaaaatg ttttgggtgt ggagaaaatgg ggcacctgtc 240  
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tatagcagaa atggtgagtc atcgtgcagt tgtgatttaa tttacactca atcacagttc 360  
ttgaataaat tcttgaataa attgcaaaaac cttgagaatt acattattt tatcaagtgc 420  
tacatcatatgt actaggctt ttgtgcaatt tgacttcaga tgtaataaaa acaaattcaga 480  
aaaaactaag gtgtatattt ccaactgtgc ttgcttcatac atttggataa ctatgtcata 540  
catttctact ttttagacata acagaaggcag agagattata tctcaagcta atatgagggtt 600  
tttaaaatcg tattatatat tcagcctcag ccagcatatac attttgggtgg aggggtgggt 660  
acagatgatt caatattgtt gtaatgtttt cttctgaatt tttttctta gttatttgtc 720  
tggtatggga tcatgttagct tttttctttaaactcgggt aattaagggtt cacacagtaa 780  
agtctatgcg gtctaaagct ttaaggcga ggttggatc tgtaatgtg atggctgggt 840  
ccatcaggct ctagacgttt cttgtgtcat gtcctgggtt tccctcctgg agaagtccag 900  
tgaaaaagca tagctttgg agttggtcag acttgggtta cagcgccagc actgccactc 960  
actagctggg gggctttggc caactaccaa actctgtatct ccgtttcctc acctatagag 1020  
tggagatgtat aaaaactatata ttattgtatt ctaagatgca cagttttca attttatct 1080  
cttggaaatc agaatgtatc ttaccgttgg tgggtccat ataattgaca gctgttttc 1140  
tttctgagag gtatgtgca taatgataca tcttataatc agtgggtgtct tagagttgtat 1200  
gaattatggt atttgctaa agaattttta taaggattaa aatgtattat tcaagtgcctt 1260  
ctcttcact atggcatata aagaggccag ggcctggaaa atgctcagggt gcatttcagg 1320  
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<210> 113  
<211> 393  
<212> DNA  
<213> Homo sapiens

<220>  
<221> unsure  
<222> (163)  
<223> a, c, g or t

<220>  
<221> unsure  
<222> (191)  
<223> a, c, q or t

<220>  
<221> unsure  
<222> (198)  
<223> a, c, q or t

<220>  
<221> unsure  
<222> (206)  
<223> a, c, q or t

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<400> 113
gcactgcagc cttaaacagg cacaatttg tctatacttc cagaacctag attattctga 60
aatcttaac aacataaggt ttagatacca tttgcattga gtacccacta ggtgccgact 120
ctttaaagt gcatttttag tttcattatc tcaacttgt aangttggca tcattattcc 180
catttacag nagataanat tgaagnaaag tcaagtttag gggatttca aggttgtaca 240
gtacaactgg gtgacaaaat tttgctctt tcaatgataa tgaggcctct gacatcttcc 300
tttctcataa gactacattt agtataactt atatattttc tcagtcaaca actatcttt 360
qagaacttgt acaccccaqqa ctqtqtaatq qqc 393
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<210> 114  
<211> 440  
<212> DNA  
<213> Homo sapiens
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<220>  
<221> unsure  
<222> (95)..(291)  
<223> a, c, g or t

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aactaggttc gtccctgcccc cgtgcagcaa gccaatcaact atgatgatgg gtttgccaa 360
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<210> 115  
<211> 791

<212> DNA

<213> Homo sapiens

<400> 115

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taaaaactaag ggagttcac ctccatgttag gttagaagaat gtgaaatggt ctgtgtccag 360  
aagccagatc agaaatggc catagcaagg tggggagggc agcgggtacc cacctggcag 420  
tgttaggggt tggattcagc ttcatcttcc tgacccttg tcaagtggac aagctccagc 480  
caaacaaagg aagtgtgtt gagggtggcac cagcacagaa gtgtacctt ctgggtaatg 540  
tgtcaccagg tcccctggcc atgtgagagg acaggcacag ttgccacaca gtactaatag 600  
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gttccatgaa gatgttatgg tggcgtgctg gcaggtgcat atcaaccctg ccctgaggcc 720  
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tggctcggt a 791

<210> 116

<211> 4351

<212> DNA

<213> Homo sapiens

<400> 116

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aaagggtggat cttgggtgc gaccctctgc actgcgaaag aagccacatc accgccaatg 240  
tggaaaatat gcaaagtgc gtttaggaaga aggaaggata tgtgtgcagc atatgaagt 300  
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gaacacaatg gtactcaaaa acatagctgc ctcggggaaa ttctccagt accgaacaat 4260  
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caatgaatct aacaaagtca atggaaattg a 4351

<210> 117  
<211> 454  
<212> DNA  
<213> Homo sapiens

<400> 117  
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cttcaacctt cattaagggtt aactattcaa ctttcattaa aaacagaaag tgacaatttc 180  
acagcaaatt cttagaacttt agatcaaaaag tcaactcaat atgggggatt tatataagaa 240  
agagttaaaa aaaagacgaa atgtaatatc tatgttattt caagtgaaag gaaaacagga 300  
agataaatat cacaagaaga caaaaatgtt tctaacattt tgggacaaga ttgtggatc 360  
cacagaaaat tggacttgg aacttcctgt tccacagaga taaganatac cttgctttt 420  
tctcacttct caaaaaagta agtgatgggg ttag 454

<210> 118  
<211> 504  
<212> DNA  
<213> Homo sapiens

<400> 118  
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cttcaacctt cattaagggtt aactattcaa ctttcattaa aaacagaaag tgacaatttc 180  
acagcaaatt cttagaacttt agatcaaaaag tcaactcaat atgggggatt tatataagaa 240  
agagttaaaa aaaagacgaa atgtaatatc tatgttattt caagtgaaag gaaaacagga 300  
agataaatat cacaagaaga caaaaatgtt tctaacattt tgggacaaga ttgtggatc 360  
cacagaaaat tggacttgg aacttcctgt tccacagaga taaganatac acttgctttt 420  
attcacttc tcaaaaaaaag taagatgaat ggggttttag gccccagaga cggacattgt 480  
agctgcaatc aattgtacta tctg 504

<210> 119  
<211> 407  
<212> DNA  
<213> Homo sapiens

<220>  
<221> unsure  
<222> (385)  
<223> a, c, g or t

<400> 119  
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gaatatattt ataataacat tcgttatatt ctttatattc ataaaacatt ggaaacaatt 180  
tttatggcca aaaatggatg aatagcttag taaatgacgg ttctctgcaa gcgatgtaat 240  
agtatgcagt cagtaagcaa atacagaaga tactaagttg caacatttga atatataata 300  
ttgtgtatta ggaagtcagg ttatcatatt taaatttga acaaaaagtaa aggttagatc 360  
agttcaattt agaaataggg gtcanttcag aaaatgttat tccatga 407

<210> 120  
<211> 104  
<212> DNA  
<213> Homo sapiens

<400> 120  
taaagaagtg ggtatcaggg actcctgtga gatagcatga gaaggtggta catttggag 60  
gtctcaaggg gttactgaat tatttgaatt agaatcaaag ggac 104

<210> 121  
<211> 149  
<212> DNA  
<213> Homo sapiens

<400> 121  
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atacactatg ttcctaaggt acctcgaaa atcctcagaa ccatgtgttg caaatggcaa 120  
tgctgtggta caatggggtc tcctaggca 149

<210> 122  
<211> 419  
<212> DNA  
<213> Homo sapiens

<400> 122  
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acagaacatg tactgaaatt gtttggatg ggagtaaagg cagctgtttg tagccatcta 180  
gttgggaact gtctttcctt ggatagtttgc ctactctgtt ggtgtgttgt gtaacactta 240  
cctgttgctg gcacgttagtc agtggatctt gtcgtatata agtggcctt gccattgtca 300  
gcaggtaatg atcttggaaa gaccaacttc tgttaatgtt atccacaatc tagtgagggg 360  
attatagcta tcaaacatat ttctcagttcc acttttaag aagtagtcat ttaggctgg 419

<210> 123  
<211> 691

<212> DNA  
<213> Homo sapiens

<400> 123

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ccgcaacttc gaactcccg gctcaagcaa tccttctgcc tcagcctccc aagagctggg 120  
actacagaca tgtgctacca catccagctt ttttattttt tgttagaggtt gggctccct 180  
atgttgccta ggtgggtctc acactccacc tcaagcaatc ctacagcttc agcctcccaa 240  
agagctagaa ttacaggcct gagccactgc acccagccta aatgactact tcttaaaaag 300  
tggactgaga aatatgttt atagctataa tcccctcaact agattgtgga ttacattaac 360  
agaagtttgtt cttccaaga tcattacctg ctgacaatgg caaggcotac ttatacatga 420  
cagaaatcac tgactacgt ccagcaacag gtaagtgtt caccacacac caacagagta 480  
gctaactatac caaggaaaga cagttcccaa ctagatggct acaaacagct gccttactc 540  
cacacacaaa caattccagt acatgttctg tgataaggctt ccaaagatct ccagtttcat 600  
ggtaccaggg aggacagaaa actcaagaat gcaattactg aaatttatttt aaactgcatt 660  
ttccttttat atgacaacta aacacatttc c 691

<210> 124

<211> 476  
<212> DNA  
<213> Homo sapiens

<400> 124

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gactaggccc catgggaggg agatcgccgt accacagctg aatggattgt ctcccctaca 180  
ttgccattca gctaagagac attcagcaat ttattgaata agcacttctt gagccccctag 240  
tgcacatgcac agacactgcg tttagggctgg gtgcacagca gtgaataaga cagacgttgt 300  
tcttgctctc gagtgtcat ggtccaatga gggagacaga gggtgactgg gaacaacagt 360  
ccagtgtat aatgctagca tagcagcaga acagggctg cacaaacaca aagaaggaac 420  
atctaactcc caaatgaaaaa gaggggattt gacaaagtcc tccttagggaa aaagaa 476

<210> 125

<211> 491  
<212> DNA  
<213> Homo sapiens

<400> 125

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acttgttatt ctgtgtgcta gatatctagg gaagtgaagg aaggacggca agggaggcag 120  
agatgaataa ggcagtgact aggccccatg ggaggggagat cgccgttacca cagctaatg 180  
gattgtctcc cctacattgc cattcagcta agagacattc agcaatttat tgaataagca 240  
cttcttgagc cccttagtgca tgcatcagac actgcgttag ggctgggtgc acagcagtga 300  
ataagacaga cgtagttctt gctctcgagt gctcatggc caatgagggta gacagagggt 360  
gactgggaac aacagtccag tgtgataatg ctatcatacg agcagaacag gggctgcaca 420  
aacacaaaga aggaacatct aactcccaa tgaaaagagg ggcattgaca aagtccctcct 480

aggaaaaaaag a

491

<210> 126  
<211> 752  
<212> DNA  
<213> Homo sapiens

<400> 126  
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atcccttctc cgcaataaaa tcttgattc tgggtgttt tggttagat gctgtggta 120  
cggtgggtt tagcaacaag gacagtgtg gttaggtgag aaacactatc ccaagtcata 180  
tgtctgtgtg actacaggac atttctttt aatgccacaa ggatgatttata 240  
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agagctagaa ttaacccta ttttcttact attgacccag catgcttct atgtgaaaa 540  
gtgcaccaca tcgagaagag attggtcacc gcagcacagg gcacgcagaa ttccattagt 600  
atcaattacc tggaaagtcc aggtgccttc aatagttgag gggagtaat gatatgacta 660  
cctacctca aaacttgttag tttaaagtgg taacttgaat actcacat 720  
ccttcctcta aaagaatggt ttttaaagg gt 752

<210> 127  
<211> 158  
<212> DNA  
<213> Homo sapiens

<400> 127  
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acctcatgtg tagccttgg aatactctc tgtatactgg tgagagaatt agagtgaaaa 120  
aagcagataa catcttagtg ttattaatga aagtagta 158

<210> 128  
<211> 642  
<212> DNA  
<213> Homo sapiens

<400> 128  
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tttcagtcga gtcatacgata ccaggtaagg cagagagtgg gagggagact gaggccttgg 120  
tctgggttttgg ggagcaactgc agctcgatgc ttggagtcag gaggggggttg ttgcacttcc 180  
ctgttctgtc ctttttcag ctttctgggtt ccctgttagct tctggaaactg attatttttt 240  
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gagaaggcaga tttgaaggct caggaacttc ctggaaagg tgacctctt tgagccaaga 360  
gctttacccc ctatgtttttt gttttttttt ttcctgtct acctggagct gagaggttat 420

cccttcaat ccctctcaag gtccagaatc accagctagg gttgggtctg cccctggagc 480  
acagactcct ccctgggga ccccagagcc cttatcgta tatcgtaag agggcaagag 540  
aacagagatt gtcagagcag aggaaacgtg tattctgtgc cccagcccc aatccatgaat 600  
atcccctgt ctcaaagcac atacttaggc taagaacagg at 642

<210> 129  
<211> 220  
<212> DNA  
<213> Homo sapiens

<400> 129  
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attttaacc cagtctgctt ctaacaggc ataagttaca ttccaagata tggatatgtat 180  
aaaactattg aatgaagttataaaagaatc aagttcatgg 220

<210> 130  
<211> 507  
<212> DNA  
<213> Homo sapiens

<400> 130  
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ttttaggaaa ccaccagggtt ctcacctt gtgggtgtgt tttatgtgtct gtatttttt 180  
ttaaactact gaaaactcaa gatctttgtt gttccacaga ttcagttctg tttatgtgtct 240  
aattatgccc caggtatatg ataatgtaca gtcacgtttc ttagagtaac tcagaacatt 300  
tatgacacag ggttatcttt acttctctag tctcagagtt tcacttagca ggtcatctga 360  
gtgaaatcta agccagattc ctgtggatct taatgaaaag gtagtagaaa gtagtggcat 420  
agcttgaat ttaactattt tcaatattt gggcaaaaac catctgtata cctcatgggc 480  
ctccagtaaa cacttgcata ttatgag 507

<210> 131  
<211> 760  
<212> DNA  
<213> Homo sapiens

<400> 131  
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ttttaggaaa ccaccagggtt ctcacctt gtgggtgtgt tttatgtgtct gtatttttt 180  
ttaaactact gaaaactcaa gatctttgtt gttccacaga ttcagttctg tttatgtgtct 240  
aattatgccc caggtatatg ataatgtaca gtcacgtttc ttagagtaac tcagaacatt 300  
tatgacacag ggttatcttt acttctctag tctcagagtt tcacttagca ggtcatctga 360  
gtgaaatcta agccagattc ctgtggatct taatgaaaag gtagtagaaa gtagtggcat 420

agcttgaat ttaactattg tcagatattg gggcaaaaac catctgtata cctcatggac 480  
ctccagtaaa cacttgtaca ttatgagtt agattgtta aagtagattt cagtattcc 540  
agagtgaatt tagtgtaact tgtgaggagg agggtgagaa tatgtatcta gttgagtgg 600  
agtacttgtg tgtctacggg tcgtaacggc catgcaacac cacccacgga atcgagaaag 660  
agtataaatac tgtcaatcct gtacgtgtcc ggaccgagtg aggttcccg tggtagttaa 720  
aattaagccg cattctccac tcctgggttt gcctaacgta 760

<210> 132  
<211> 214  
<212> DNA  
<213> Homo sapiens

<400> 132  
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ttcctactag agattnagaa agaagactcg agtacctgc ttttcatgtc tctgtatgg 120  
tttctccctt ttcactgccc tttttcttc cctcattac ccctgtgttc tgtactgtca 180  
cttgcttcca gttgtcaata tggtgatttc tggt 214

<210> 133  
<211> 479  
<212> DNA  
<213> Homo sapiens

<400> 133  
ccttaggata aaaatttagtc ttcccaaacag gagataaaaa gaccaccaga actgggtcag 60  
ttcctggctc tccattcaca tcattcattt tctctacctc agacttgaca ctccagtata 120  
actttttgtt gatagtagtt cagtgggata gaccatcaat tgattgcata cctccatgct 180  
ttgctaatgt tcttcttattt atccaaaacc cttcccatgt ttttgcttaa acatcattca 240  
tattccaaga ctaaaagtcaa tgaaaatcta tatcaggatg attgtcctca atcttctgg 300  
tggactacat gtctctcattc aattataactt tgatcatca gtctgatca ttcaaataatgt 360  
ctgtgttata tatgtgcctc aggctaatga ctattaatac ctgttatatta gaaaagaaag 420  
cctggtgctt agtagaattt tgtaataat ttcgtcagct gaaccaatgc attaataact 479

<210> 134  
<211> 270  
<212> DNA  
<213> Homo sapiens

<400> 134  
tagggatttc gtcacttgga agtaagaagg ttcagtcattttggccagc tttgtgttgt 60  
gttggaaaatt agcccccaaa gagaattcct gcagaaggc agggtctttg ggttatttct 120  
acacttgagc ctctttttt ttaagatga catactgtt atagttgtca aatatggaca 180  
ataacaggaa gccaaactca aataataata atagggtgtt acaaagccgt ggcacatgg 240  
ccccactgtc gtccagctgt ctggagctga 270

<210> 135  
<211> 404  
<212> DNA  
<213> Homo sapiens

<400> 135  
acgcgtccgt gaaaaggaag aatacctatt acttaggtat tggaaattg aaaatgaaga 60  
atgaaagaaa gagggaggga agagactttt gtgttctat ggagaacaac attggggccc 120  
ttgacttttag attcagtgg ggacctacaa aaagaaaaa tggaaaggaa attctgaagt 180  
cttaaggtgg gctatctgaa agttggatcc ctgggtgaaa aagattttat aatattagat 240  
gagttgagag aaccaatgtg aattaaagct gactggctta aaaaaataaa acccatcaaa 300  
attagtaagg gaataatgtt attcattgcc ttttttcgt tgagttatga aagctctcg 360  
aagatgaagg ttttatgaaa ctcaagatct ctccagaggc cgccc 404

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<210> 136  
<211> 553  
<212> DNA  
<213> Homo sapiens

<220>  
<221> unsure  
<222> (446)  
<223> a, c, g or t

<400> 136  
acgcgtccgt gaaaaggaag aatacctatt acttaggtat tggaaattg aaaatgaaga 60  
atgaaagaaa gagggaggga agagactttt gtgttctat ggagaacaac attggggccc 120  
ttgacttttag attcagtgg ggacctacaa aaagaaaaa tggaaaggaa attctgaagt 180  
cttaaggtgg gctatctgaa agttggatcc ctgggtgaaa aagattttat aatattagat 240  
gagttgagag aaccaatgtg aattaaagct gactggctta aaaaaataaa acccatcaaa 300  
attagtaagg gaataatgtt attcattgcc ttttttcgt tgagttatga aagctctcg 360  
aagatgaagg ttttatgaaa ctcaagatct ctccagaggc cgcccacagt ggctcgcgccc 420  
tgtaattcca gcactttggg aggctnaggt gagcagattg cgagtcacaga agtgagcaga 480  
ttgcttgagt ccaggagttc gagaccagcc tggcaacat ggcaaaaccc ctgtctctac 540  
aaaaaaaaaaa aaa 553

<210> 137  
<211> 41  
<212> PRT  
<213> Homo sapiens

<400> 137  
Met Lys Val Arg Ser Ile His Pro Ser Ser Ala Thr Cys Ala Ser Ala  
1 5 10 15

Leu His Leu Pro Gln Leu Thr Thr Glu Lys Arg Thr Gln Leu His Lys  
20 25 30

Arg Asp Cys Lys Ile Arg Lys Tyr Ile  
35 40

<210> 138  
<211> 47  
<212> PRT  
<213> Homo sapiens

<400> 138  
Met Val Thr Leu Gln Met Pro Ser Val Ala Ala Gln Thr Ser Leu Thr  
1 5 10 15

Asn Ser Ala Phe Gln Ala Glu Ser Lys Val Ala Ile Val Ser Gln Pro  
20 25 30

Val Ala Arg Ser Ser Val Ser Ala Asp Ser Arg Ile Cys Thr Glu  
35 40 45

<210> 139  
<211> 55  
<212> PRT  
<213> Homo sapiens

<400> 139  
Ile Gln Asp Lys Asp Ser Val Asn Met Val Thr Leu Gln Met Pro Ser  
1 5 10 15

Val Ala Ala Gln Thr Ser Leu Thr Asn Ser Ala Phe Gln Ala Glu Ser  
20 25 30

Lys Val Ala Ile Val Ser Gln Pro Val Ala Arg Ser Ser Val Ser Ala  
35 40 45

Asp Ser Arg Ile Cys Thr Glu  
50 55

<210> 140  
<211> 47  
<212> PRT  
<213> Homo sapiens

<400> 140

Met Phe Leu Tyr Ala Phe Met Tyr Ile Phe His Leu Tyr Asn Glu Cys  
1 5 10 15

Met Tyr Leu Leu Ser Leu Tyr Lys Leu Leu Leu Phe Val Ile Phe Phe  
20 25 30

Phe Phe Pro Phe Phe Gly Phe Leu Thr Phe Gln Lys Met Lys His  
35 40 45

<210> 141

<211> 70

<212> PRT

<213> Homo sapiens

<400> 141

Met Asn Leu Gly Asn Lys Pro Tyr Phe Leu Ile Thr Met Leu Asp His  
1 5 10 15

Leu Ser Pro Arg Arg Gly Trp Gly Thr Gln Asp Glu Ser Leu Gly Ser  
20 25 30

Leu Trp Tyr Gln Ile Leu Asn Ile Pro Ser Leu Leu Asn Ala Thr Leu  
35 40 45

Leu Leu Pro Leu Leu Glu Gly Lys Asn Ala Lys Met Gly Ile Ser Leu  
50 55 60

Ser Leu Gly Pro Val Pro

65 70

<210> 142

<211> 11

<212> PRT

<213> Homo sapiens

<400> 142

Met Tyr Trp Tyr Ser Phe Gln Ser Ser Ser Trp  
1 5 10

<210> 143

<211> 230

<212> PRT

<213> Homo sapiens

<400> 143

Leu Asp Arg Leu Ser Lys Ala Lys Ile Asp Lys Lys Thr Leu Asp Leu  
1 5 10 15

Asn Ala Thr Leu Asp Gln Met Asp Leu Thr Asp Ile Tyr Arg Thr Val  
20 25 30

Tyr Leu Thr Pro Thr Asp Tyr Thr Phe Phe Ser Ser Ala Cys Gly Thr  
35 40 45

Phe Ser Arg Ile Asp His Met Leu Ser His Lys Thr Ser Leu Asn Lys  
50 55 60

Phe Leu Lys Ile Gly Ile Ile Gln Ser Ile Phe Ser Asp His Lys Arg  
65 70 75 80

Ile Lys Leu Glu Ile His Thr Lys Arg Asn Phe Gly Asn Tyr Thr Asn  
85 90 95

Thr Trp Lys Leu Asn Met Leu Leu Asn Asn Tyr Trp Val Asn Glu Glu  
100 105 110

Ile Lys Met Glu Ile Ala Lys Phe Leu Lys Thr Asn Arg Asn Gly Asn  
115 120 125

Ala Thr Tyr Gln Asn Met Trp Asp Thr Ala Arg Ala Met Ala Arg Gly  
130 135 140

Asn Leu Thr Val Ile Asn Ala Tyr Ile Lys Lys Val Val Glu Ile Phe  
145 150 155 160

Ala Ile Lys Asn Leu Ser Met His Leu Lys Glu Leu Glu Lys Gln Lys  
165 170 175

Gln Thr Asn Pro Gln Ser Ser Arg Gln Lys Glu Ile Met Lys Ser Arg  
180 185 190

Ala Asp Gln Asn Glu Thr Asp Lys Lys Thr Ile Gln Arg Val Asn Glu  
195 200 205

Met Lys Ser Cys Phe Phe Lys Lys Ile Asn Lys Ile Asp Asn Pro Leu  
210 215 220

Ala Ala Leu Thr Lys Lys  
225 230

<210> 144  
<211> 149

<212> PRT

<213> Homo sapiens

<400> 144

Met Tyr Gln Leu Arg Leu Val Thr Leu Phe Gln Ile His Met Lys Gly  
1 5 10 15

Ala Ile Pro Leu Lys Leu Phe Thr Asp Val Leu Cys Lys Arg Trp Ser  
20 25 30

Thr Lys Glu Thr His Gln Met Gly Gly Glu Ala Asp Pro Gly His Ala  
35 40 45

Gln Arg Glu Gln Leu Gly Thr Trp Ala Gly Ile Gly Lys Lys Val Val  
50 55 60

Gln Arg Ala Arg Pro Gly Pro Ala Leu Ser Gly Ser Gly Gly Leu  
65 70 75 80

Cys Leu Ser Ala Leu Pro Pro Gly Leu Pro Pro Met Thr Val His Pro  
85 90 95

Cys Arg Asn His Leu Arg Pro Pro Thr Pro Thr Pro Ala Pro Leu Gly  
100 105 110

Ser Tyr His Leu Pro Phe Pro Pro Ser Ser Leu Ser Pro Thr Lys Ala  
115 120 125

Ser Leu Cys Phe Leu Glu Ala Ser Ile Thr Gly Ser Cys Pro Gly Pro  
130 135 140

Ser Trp Gly Thr Arg

145

<210> 145

<211> 31

<212> PRT

<213> Homo sapiens

<400> 145

Met Gly Trp Asn Glu Glu Gln Ser Cys Pro Pro Val Pro Gly Gly  
1 5 10 15

Thr Val Ser Arg Lys Ile His Thr Tyr Leu Lys Leu Gln Lys Gly  
20 25 30

<210> 146  
<211> 106  
<212> PRT  
<213> Homo sapiens

<400> 146

Cys	Gly	Trp	Trp	Thr	Gly	Met	Pro	Gly	Ser	Ser	Pro	Gly	Ser	Leu	Leu
1				5				10				15			
Pro	Ser	Asn	Arg	Leu	Ser	Leu	Val	Pro	Leu	Val	Pro	Ser	Ala	Ser	Met
	20						25					30			
Thr	Arg	Leu	Met	Arg	Ser	Arg	Thr	Ala	Ser	Gly	Ser	Ser	Val	Thr	Ser
	35						40					45			
Leu	Asp	Gly	Thr	Arg	Ser	Arg	Ser	His	Thr	Ser	Glu	Gly	Thr	Arg	Ser
	50						55				60				
Arg	Ser	His	Thr	Ser	Glu	Gly	Thr	Arg	Ser	Arg	Ser	His	Thr	Ser	Glu
	65						70				75				80
Gly	Ala	His	Leu	Asp	Ile	Thr	Pro	Asn	Ser	Gly	Ala	Ala	Gly	Asn	Ser
	85							90					95		
Ala	Gly	Pro	Lys	Ser	Met	Glu	Val	Ser	Cys						
	100						105								

<210> 147  
<211> 72  
<212> PRT  
<213> Homo sapiens

<400> 147

Met	Ser	His	Gly	Ser	Gly	Trp	Gln	Cys	Tyr	Ser	Pro	Met	Asn	Thr	Asp
1						5				10			15		
His	Ser	Ser	Asn	Thr	Gly	Asp	Trp	Ser	His	Thr	Ala	Thr	Phe	Leu	Ser
	20						25						30		
Arg	Gln	Arg	His	Lys	Thr	Arg	Lys	Asn	Arg	Thr	Thr	Leu	Arg	Ala	Val
	35						40					45			
Met	Trp	Glu	Cys	Gly	Pro	Ser	Tyr	Asn	Thr	Gln	His	Gln	Asn	Trp	Thr
	50						55				60				
Leu	His	Leu	Lys	Gly	Phe	Lys	Thr								
	65					70									

<210> 148  
<211> 24  
<212> PRT  
<213> Homo sapiens

<400> 148  
Met Glu Gly Pro Thr Asn Arg Ser Ser Leu Glu Pro Pro Glu Glu Ala  
1 5 10 15  
  
Gln Pro Ser Gln Gln Phe Gly Arg  
20

<210> 149  
<211> .70  
<212> PRT  
<213> Homo sapiens

<400> 149  
Met Leu Asp Leu Leu Ile Val Phe Arg Ile Lys Ser Lys Leu Leu Lys  
1 5 10 15

Met Ala Phe His Asp Leu Val Ser Pro His Gln Asn Ala His Thr Met  
20 25 30

Leu Leu Leu Thr Pro Ser Gln Leu Trp Leu Pro Ser Thr Cys Ser Ser  
35 40 45

Gln Ala Ser Thr Ser Phe Leu Val Ser Ala Val Leu Leu Ser Pro Pro  
50 55 60

Ser Leu Leu Ser Pro Gly  
65 70

<210> 150  
<211> 46  
<212> PRT  
<213> Homo sapiens

<400> 150  
Met Ser Thr Cys Phe Leu Ala Ser His Gly Asn Ser Cys Leu Leu Cys  
1 5 10 15  
  
Ser Phe Ser Ile Ile Ser Leu Leu Leu Ala Ser Lys Glu Ser Phe Val  
20 25 30

Gly Ile Leu Pro Ser Ser Ser Tyr Leu Leu Cys Lys Ile Thr  
35 40 45

<210> 151  
<211> 40  
<212> PRT  
<213> Homo sapiens

<400> 151  
Met Glu Arg Phe Lys Glu Arg Gly Arg His Gly Ala Phe Met Pro  
1 5 10 15

Ser Pro Gly Thr Leu Pro Ser Arg Asn Leu Gln Thr Val Gln Leu Ser  
20 25 30

Gly Ser Ser Leu Asn Leu Val Ile  
35 40

<210> 152  
<211> 32  
<212> PRT  
<213> Homo sapiens

<400> 152  
Met Leu Gly Ser Glu Cys Leu Leu Phe Met His Leu Leu Lys Lys Leu  
1 5 10 15

Leu Gln Gly Asn Lys Lys Arg Ile Gln Glu Arg Gly His His Gly Leu  
20 25 30

<210> 153  
<211> 956  
<212> PRT  
<213> Homo sapiens

<400> 153  
Met Lys Ala Glu Ile Lys Val Phe Phe Glu Thr Asn Glu Asn Lys Asp  
1 5 10 15

Thr Thr Tyr Gln Asn Leu Trp Asp Thr Phe Lys Ala Val Cys Arg Gly  
20 25 30

Lys Phe Ile Ala Leu Asn Ala His Lys Arg Lys Gln Glu Arg Ser Lys  
35 40 45

Ile Asp Thr Leu Thr Ser Gln Leu Lys Glu Leu Glu Lys Gln Glu Gln  
50 55 60

Thr His Ser Lys Ala Ser Arg Arg Gln Glu Ile Thr Lys Ile Arg Ala  
65 70 75 80

Glu Leu Lys Glu Ile Gln Thr Gln Lys Thr Leu Gln Lys Ile Asn Glu  
85 90 95

Ser Arg Ser Trp Phe Phe Glu Arg Ile Asn Lys Ile Asp Arg Ser Leu  
100 105 110

Ala Arg Leu Ile Lys Lys Lys Arg Glu Lys Asn Gln Ile Asp Thr Ile  
115 120 125

Lys Asn Asp Lys Gly Asp Ile Thr Thr Asp Pro Thr Glu Ile Gln Thr  
130 135 140

Thr Ile Arg Glu Tyr Tyr Lys His Leu Tyr Ala Asn Lys Leu Glu Asn  
145 150 155 160

Leu Glu Glu Met Asp Lys Phe Leu Asp Thr Tyr Thr Leu Pro Arg Leu  
165 170 175

Asn Gln Glu Glu Val Glu Ser Leu Asn Arg Pro Ile Thr Gly Ala Glu  
180 185 190

Ile Val Ala Ile Ile Asn Ser Leu Pro Thr Lys Lys Ser Pro Gly Pro  
195 200 205

Asp Gly Phe Thr Ala Glu Phe Tyr Gln Ser Trp Ala Glu Thr Gln Pro  
210 215 220

Lys Lys Glu Asn Phe Arg Pro Ile Ser Leu Met Asn Ile Asp Ala Lys  
225 230 235 240

Ile Leu Asn Lys Ile Leu Ala Lys Arg Ile Gln Gln His Ile Lys Lys  
245 250 255

Leu Ile His His Asp Gln Val Gly Phe Ile Pro Gly Met Gln Gly Trp  
260 265 270

Phe Asn Ile Arg Lys Ser Ile Asn Val Thr Gln His Ile Asn Arg Ala  
275 280 285

Lys Asp Lys Asn His Met Ile Ile Ser Ile Asp Ala Glu Lys Ala Phe  
290 295 300

Asp Lys Ile Gln Gln Pro Phe Met Leu Lys Thr Leu Asn Lys Leu Gly  
305 310 315 320

Ile Asp Gly Thr Tyr Phe Lys Ile Ile Arg Ala Ile Tyr Asp Asn Pro  
325 330 335

Thr Ala Asn Ile Ile Leu Asn Gly Gln Lys Leu Glu Ala Phe Pro Leu  
340 345 350

Lys Thr Gly Thr Arg Gln Gly Cys Pro Leu Ser Pro Leu Leu Phe Asn  
355 360 365

Ile Val Leu Glu Val Leu Ala Arg Ala Ile Arg Gln Glu Lys Glu Ile  
370 375 380

Lys Gly Ile Gln Leu Gly Lys Glu Glu Val Lys Leu Ser Leu Phe Ala  
385 390 395 400

Asp Asn Met Ile Val Tyr Leu Glu Asn Pro Ile Val Ser Ala Gln Asn  
405 410 415

Leu Leu Lys Leu Ile Ser Asn Phe Ser Lys Val Ser Gly Tyr Lys Ile  
420 425 430

Asn Val Gln Lys Ser Gln Ala Phe Leu Tyr Thr Asn Asn Arg Gln Thr  
435 440 445

Glu Ser Gln Ile Met Ser Gln Leu Pro Phe Thr Ile Ala Ser Lys Arg  
450 455 460

Ile Lys Tyr Leu Gly Ile Gln Leu Thr Arg Asp Val Lys Asp Leu Phe  
465 470 475 480

Lys Glu Asn Tyr Lys Pro Leu Leu Lys Glu Ile Lys Glu Asp Thr Asn  
485 490 495

Lys Trp Lys Asn Ile Pro Cys Ser Gly Glu Gly Arg Ile Asn Ile Val  
500 505 510

Lys Met Ala Ile Leu Pro Lys Glu Leu Glu Lys Thr Thr Leu Lys Phe  
515 520 525

Ile Trp Asn Gln Lys Arg Ala His Ile Ala Lys Ser Ile Leu Asn Gln  
530 535 540

Lys Asn Lys Ala Gly Gly Ile Thr Leu Pro Asp Phe Lys Leu Tyr Tyr  
545 550 555 560

Lys Ala Thr Val Thr Lys Thr Ala Trp Tyr Trp Tyr Gln Asn Arg Asp  
565 570 575

Ile Asp Gln Trp Asn Arg Thr Glu Pro Ser Glu Ile Thr Gln His Ile  
580 585 590

Tyr Ser Tyr Leu Ile Phe Asp Lys Pro Glu Lys Asn Lys Gln Trp Gly  
595 600 605

Lys Asp Ser Leu Phe Asn Lys Trp Cys Trp Glu Asn Trp Leu Ala Ile  
610 615 620

Cys Arg Lys Leu Lys Leu Asp Pro Phe Leu Thr Pro Tyr Thr Lys Met  
625 630 635 640

Asn Ser Arg Trp Ile Lys Asp Leu Asn Val Arg Pro Lys Thr Ile Lys  
645 650 655

Thr Leu Glu Glu Asn Leu Gly Ile Thr Ile Gln Asp Ile Gly Met Gly  
660 665 670

Lys Asp Phe Met Ser Lys Thr Pro Lys Ala Met Ala Thr Lys Asp Lys  
675 680 685

Ile Asp Lys Trp Asp Leu Val Lys Leu Lys Ser Phe Cys Thr Ala Lys  
690 695 700

Glu Thr Thr Ile Arg Val Asn Arg Gln Pro Thr Lys Trp Glu Lys Ile  
705 710 715 720

Phe Ala Thr Tyr Ser Ser Asp Lys Gly Leu Ile Ser Arg Ile Tyr Asn  
725 730 735

Glu Leu Lys Gln Ile Tyr Lys Lys Thr Asn Asn Pro Ile Lys Lys  
740 745 750

Trp Ala Lys Asp Met Asn Arg His Phe Ser Lys Glu Asp Ile Tyr Ala  
755 760 765

Ala Lys Lys His Met Lys Lys Cys Ser Ser Ser Leu Ala Ile Arg Glu  
770 775 780

Met Gln Ile Lys Thr Thr Met Arg Tyr His Leu Thr Pro Val Arg Met  
785 790 795 800

Ala Ile Ile Lys Lys Ser Gly Asn Asn Arg Cys Trp Arg Gly Cys Gly  
805 810 815

Glu Thr Gly Thr Leu Leu His Cys Trp Trp Asp Cys Lys Leu Ala Gln  
820 825 830

Pro Leu Trp Lys Ser Val Trp Arg Phe Leu Arg Asp Leu Glu Leu Glu  
835 840 845

Ile Pro Phe Asp Pro Ala Ile Pro Leu Leu Gly Ile Tyr Pro Lys Asp  
850 855 860

Tyr Lys Ser Cys Cys Tyr Lys Asp Thr Cys Thr Arg Met Phe Ile Ala  
865 870 875 880

Ala Leu Phe Thr Ile Ala Lys Thr Trp Asn Gln Pro Lys Cys Pro Thr  
885 890 895

Ile Ile Asp Trp Ile Lys Lys Met Trp His Ile Tyr Thr Met Glu Tyr  
900 905 910

Tyr Ala Ala Ile Lys Asn Asp Glu Phe Val Ser Phe Val Gly Thr Trp  
915 920 925

Met Lys Leu Glu Ile Ile Ile Leu Ser Lys Leu Ser Gln Glu Gln Lys  
930 935 940

Thr Thr His Arg Ile Phe Ser Leu Ile Gly Gly Asn  
945 950 955

<210> 154  
<211> 39  
<212> PRT  
<213> Homo sapiens

<400> 154  
Met Ile Ile Thr Ser Gln Gly Asn Phe Leu Phe Pro Leu Phe Ile Ser  
1 5 10 15

Leu Leu His His Tyr Ser Gln Ser Leu Ser Leu Phe Pro Lys Glu Val  
20 25 30

Phe His Gly Phe Leu Thr Asp  
35

<210> 155  
<211> 37  
<212> PRT  
<213> Homo sapiens

<400> 155  
Met Val Leu Ser Cys Tyr Ser Leu Val Thr Phe Arg Ser Ser Leu Leu  
1 5 10 15  
  
Thr Lys Gly Lys Ile Ile Tyr Lys Tyr Gln Met Thr Ile Glu Leu Ser  
20 25 30  
  
Gln Leu Met Phe Phe  
35

<210> 156  
<211> 110  
<212> PRT  
<213> Homo sapiens

<400> 156  
Met Gly Cys His Gly Gly Ala Arg Asp Ser Cys Val Asn Arg Glu Cys  
1 5 10 15  
  
Gly Phe Leu Gln Arg Gly Val Trp Arg Trp Thr Ser Arg Ser Phe Trp  
20 25 30  
  
Ser Leu Arg Glu Gly Gln Gln Ser Ser Arg His Phe Met Asn His Ile  
35 40 45  
  
Leu Ala Val Ala Ala Phe Ala Ser Pro Gly Gly Trp Ser His Ala Leu  
50 55 60  
  
Ala Ala Arg Leu Arg His Pro Pro Val His Ser Val Pro Trp Pro Pro  
65 70 75 80  
  
Ala Val Gly Leu Ala Leu Phe Ser Thr Asn Asn Pro Gln Cys Ile Val  
85 90 95  
  
Met Thr Ser Ala Thr Asn Val Asp Val Ser Met Tyr His Ile  
100 105 110

<210> 157  
<211> 62  
<212> PRT  
<213> Homo sapiens

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<400> 157  
Met Gly Ser His Phe Pro Gln Ser Arg Trp His Lys Leu His Glu Val  
1 5 10 15  
  
Ala Ala Val Pro Leu His Pro Asp Gln Ser Leu Ala Pro Gln Trp Asn  
20 25 30  
  
His Thr Pro Pro Leu Pro Glu Ala Glu Ser Leu Phe Tyr Gly Arg Ala  
35 40 45  
  
Ala Ala Leu Gly Thr Phe Leu Asn Ser Pro Val Phe His Leu  
50 55 60

<210> 158  
<211> 241  
<212> PRT  
<213> Homo sapiens  
  
<400> 158  
Glu Gly Cys Leu Trp Pro Ser Glu Ser Thr Val Ser Gly Asn Gly Ile  
1 5 10 15  
  
Pro Glu Cys Pro Cys Cys Trp Asp Pro Pro Cys Arg Arg Ser Ser Ala  
20 25 30  
  
Pro Cys Pro Ala Gly Ser Ser Pro Ala Leu Cys Ser Leu His Thr Gly  
35 40 45  
  
Ala Arg Thr Leu Pro Leu Phe Gly Gly Arg Pro Gln Val Tyr Ala  
50 55 60  
  
Pro Pro Arg Pro Thr Asp Arg Leu Ala Val Pro Pro Phe Ala Gln Arg  
65 70 75 80  
  
Glu Arg Phe His Arg Phe Gln Pro Thr Tyr Pro Tyr Leu Gln His Glu  
85 90 95  
  
Ile Asp Leu Pro Pro Thr Ile Ser Leu Ser Asp Gly Glu Glu Pro Pro  
100 105 110  
  
Pro Tyr Gln Gly Pro Cys Thr Leu Gln Leu Arg Asp Pro Glu Gln Gln  
115 120 125  
  
Leu Glu Leu Asn Arg Glu Ser Val Arg Ala Pro Pro Asn Arg Thr Ile  
130 135 140

Phe Asp Ser Asp Leu Met Asp Ser Ala Arg Leu Gly Gly Pro Cys Pro  
145 150 155 160

Pro Ser Ser Asn Ser Gly Ile Ser Ala Thr Cys Tyr Gly Ser Gly Gly  
165 170 175

Arg Met Glu Gly Pro Pro Pro Thr Tyr Ser Glu Val Ile Gly His Tyr  
180 185 190

Pro Gly Ser Ser Phe Gln His Gln Gln Ser Ser Gly Pro Pro Ser Leu  
195 200 205

Leu Glu Gly Thr Arg Leu His His Thr His Ile Ala Pro Leu Glu Ser  
210 215 220

Ala Ala Ile Trp Ser Lys Glu Lys Asp Lys Gln Lys Gly His Pro Leu  
225 230 235 240

Leu

<210> 159

<211> 50

<212> PRT

<213> Homo sapiens

<400> 159

Met Ile His Phe Leu Ser Phe Ser Thr Asn Asn Ala Tyr Ala Leu Asp  
1 5 10 15

Leu Pro Glu Tyr Ser Trp Thr Thr Asp Leu Cys Lys Lys Leu Phe Phe  
20 25 30

Leu Lys Ile Ala Ser Lys Gln Asn Gly Phe Asn Lys Leu Gln Asn Arg  
35 40 45

Gln Pro

50

<210> 160

<211> 37

<212> PRT

<213> Homo sapiens

<400> 160

Met Ile Cys Pro Phe Phe Leu His Ser Phe Thr Ser Ser Phe Tyr

1

5

10

15

Cys Tyr Phe Leu Lys Arg Ile Asn Pro Leu Ala Val Leu Phe Arg Val  
20 25 30

Phe Phe Thr Leu Phe  
35

<210> 161  
<211> 75  
<212> PRT  
<213> Homo sapiens

<400> 161  
Met Leu Val Lys Ser Arg Cys Leu Cys Leu Cys Pro Phe Cys Leu Gly  
1 5 10 15

Leu Leu Glu Thr Asp Ala Gly Gly Ser Val Ala Pro His Cys Ser Gly  
20 25 30

Tyr Val Pro Trp Ser Gln Ala Leu Leu Leu Arg Ser Leu Leu Glu  
35 40 45

Met Gln Asn Leu Arg Pro Asn Ser Arg Pro Met Thr Gln Ser Leu His  
50 55 60

Phe Asn Arg Cys Leu Cys Asp Ser Cys Ala Gly  
65 70 75

<210> 162  
<211> 105  
<212> PRT  
<213> Homo sapiens

<400> 162  
Gln Met Gln Gln Asn Thr Gln Lys Val Glu Ala Ser Lys Val Pro  
1 5 10 15

Glu Tyr Ile Lys Lys Ala Ala Lys Lys Ala Ala Glu Phe Asn Ser Asn  
20 25 30

Leu Asn Arg Glu Arg Met Glu Glu Arg Arg Ala Tyr Phe Asp Leu Gln  
35 40 45

Thr His Val Ile Gln Val Pro Gln Gly Lys Tyr Lys Val Leu Pro Thr  
50 55 60

Glu Arg Thr Lys Val Ser Ser Tyr Pro Val Ala Leu Ile Pro Gly Gln  
65 70 75 80

Phe Gln Glu Tyr Tyr Lys Ser Ile Ala Ala Phe Ala Leu His Cys Ile  
85 90 95

Gly Tyr Trp Ala Gly Val Ser Glu Pro  
100 105

<210> 163

<211> 44

<212> PRT

<213> Homo sapiens

<400> 163

Met Thr Pro His Cys Pro Gln Asn Arg Leu His Phe Leu Leu Ala Tyr  
1 5 10 15

Lys Ala Asn Leu Asn Leu Thr Pro Gly Arg His Pro Ala Thr Val Thr  
20 25 30

His Ile Leu Val Ile Pro Ser Thr Ile Gly Arg Leu  
35 40

<210> 164

<211> 25

<212> PRT

<213> Homo sapiens

<400> 164

Met Thr Met Trp Asn Cys Leu Leu Thr Cys Lys Val Thr His Asn Ile  
1 5 10 15

Met Val Lys Phe Leu Lys Ser Asn Tyr  
20 25

<210> 165

<211> 67

<212> PRT

<213> Homo sapiens

<400> 165

Met Thr Gly Tyr Cys Met Trp Glu Ile Met Lys Pro Phe Ala Val Ser  
1 5 10 15

Ser Pro Val Ser Phe Arg Val Ser Val Leu Ser Lys Pro Pro Cys Glu  
20 25 30

Val Asn Gln Met Leu Asp Phe Phe Pro Gln Ser His Gln Leu Pro Arg  
35 40 45

Glu Arg Asp Thr Tyr Arg Thr Leu Pro Ser Ala Tyr Ser Ser Ser Ala  
50 55 60

Pro Ser Thr  
65

<210> 166  
<211> 42  
<212> PRT  
<213> Homo sapiens

<400> 166  
Met Leu Glu Met Ser Phe Ala Leu Pro Glu Phe Ala Lys Gly Ala His  
1 5 10 15

Arg Lys Gln Ile Glu Lys His Pro Leu Gly Thr Ser Leu Gln Cys Leu  
20 25 30

Leu Leu Thr Lys Phe Asn Ile Ile Asn Thr  
35 40

<210> 167  
<211> 47  
<212> PRT  
<213> Homo sapiens

<400> 167  
Met Ala Ser Val Ala Arg Lys Tyr Ala Lys Glu Glu Val Asn Pro Ile  
1 5 10 15

Ala Gly Leu Glu Asp Ser Asp Gln Thr Thr Arg Gly Leu Leu Asn Lys  
20 25 30

Gly Arg Arg Cys Pro Cys Leu Met Gly Leu Ala Trp Gly Gly Gly  
35 40 45

<210> 168  
<211> 74

<212> PRT

<213> Homo sapiens

<400> 168

Met Arg Phe Ser His Phe Phe Pro Val Phe Phe Ile Thr Phe Arg Lys  
1 5 10 15

Ala Ile Leu Phe Ser Leu Tyr Thr Thr Cys Thr Leu Leu Val Gly Leu  
20 25 30

Ile Pro Arg Cys Ile Asn Ile Ile Ala Phe Met Asn Gly Ile Phe Phe  
35 40 45

Ile Val Phe Ser Asn Cys Leu Leu Asp Tyr Met Glu Ile Asp Phe Trp  
50 55 60

His Ala Asp Ile Ser Ser Lys Lys Leu Tyr  
65 70

<210> 169

<211> 27

<212> PRT

<213> Homo sapiens

<400> 169

Met Thr Lys Tyr Ser Pro Leu Pro Leu Phe Leu His Phe Ile Leu Thr  
1 5 10 15

Thr Ile Phe Phe Leu Ala Pro Phe Pro Leu Phe  
20 25

<210> 170

<211> 54

<212> PRT

<213> Homo sapiens

<400> 170

Met Leu Lys Val Arg Arg Leu Lys Asn Xaa Arg Ala Thr Val Trp Leu  
1 5 10 15

Pro Gly Ile Gly Lys Gln Val Met Asp Phe Ser Leu Lys Gly Glu Ile  
20 25 30

Ser Gly Val Gln Leu Gln His Leu Leu Leu Ile Asn Leu Ser Val Cys  
35 40 45

Ala Ser Ser Ser Ile Glu

50

<210> 171

<211> 14

<212> PRT

<213> Homo sapiens

<400> 171

Met Pro Thr Gln Arg Gln Pro Leu Ser Ser Gln Ala Val Lys  
1 5 10

<210> 172

<211> 42

<212> PRT

<213> Homo sapiens

<400> 172

Met Ala Ala Ser Val Leu Gln Ser Arg Trp Leu Ile Val Ile Leu Val  
1 5 10 15

Gln Lys Arg Ile His Thr His Thr Tyr Lys Tyr Val Ser Cys Leu Asp  
20 25 30

Pro Gln Glu Phe His Val Ser Leu Tyr Leu  
35 40

<210> 173

<211> 121

<212> PRT

<213> Homo sapiens

<400> 173

Met Arg Thr Ser Lys Trp Ile Pro Pro Cys Lys Cys Gly Ala Gly Ala  
1 5 10 15

Thr Arg His Cys Ser Gly His Ala Ser Lys Thr Gln Ala Glu Gly Ala  
20 25 30

Ala His His Ala Gly Asp Gly Leu Lys Ala Pro Val His Ala Trp Asp  
35 40 45

Ser Ala Gln Gly Pro Cys Ser Cys Leu Gly Gln Ala Pro Gly Pro Pro  
50 55 60

Leu Ala Ala Val Ser Ser Gly Gln Gly Gly Gly Arg Tyr Gly His  
65 70 75 80

Ser Val Gly Arg Ser Trp Glu Asn Lys Ala Tyr Tyr Trp Thr Pro Gly  
85 90 95

Gly His Gly Asn His Thr Arg Met Pro Glu Thr Glu Asn Leu Trp Ala  
100 105 110

Ser Arg Ser Ser Ser Cys Thr Gly  
115 120

<210> 174

<211> 25

<212> PRT

<213> Homo sapiens

<400> 174

Met Gly Asn Tyr Ala Asn Asn Lys Lys Arg Thr Leu Arg Ser Ile Asn  
1 5 10 15

Thr Val His Lys Tyr Gly Gly Leu Phe  
20 25

<210> 175

<211> 33

<212> PRT

<213> Homo sapiens

<400> 175

Met Pro Ser Phe Arg Ile Leu Asp Thr Cys Cys Phe Ser Pro Ser His  
1 5 10 15

Glu Thr Phe Cys Lys Asn Lys Glu Arg Gly Ile Thr Val Cys His His  
20 25 30

Ser

<210> 176

<211> 30

<212> PRT

<213> Homo sapiens

<220>

<221> UNSURE  
<222> (7)

<220>  
<221> UNSURE  
<222> (11)

<400> 176  
Met Ile Phe Pro Val Lys Xaa Leu Ile Arg Xaa Ile Pro Arg Asn Leu  
1 5 10 15

Leu Tyr Ile Met Asp Phe Asp Ile Tyr Leu Val Lys Val Lys  
20 25 30

<210> 177  
<211> 42  
<212> PRT  
<213> Homo sapiens

<400> 177  
Met Val Ala Ser Val Met Glu Ser Ala Asp Leu Glu Glu Gln Thr Gln  
1 5 10 15

Leu Val Thr Glu Leu Pro Gly Gly Arg Leu Ser Leu Gly Met Glu Gly  
20 25 30  
Tyr Arg Asn Phe Arg Val Leu Gln Asn Phe  
35 40

<210> 178  
<211> 80  
<212> PRT  
<213> Homo sapiens

<400> 178  
Met Tyr Phe Pro Pro Ala Phe Phe Phe Pro Phe Glu Tyr Val Ser Leu  
1 5 10 15  
Asn Leu Phe Ser Lys Ser Ala Arg Leu Ala Leu Ser Ser His Phe Leu  
20 25 30

Ser Leu Ser Ser Ser Tyr Leu Ser Val Phe Phe Leu Leu Val Leu Leu  
35 40 45

Phe Leu Tyr Phe Ser Pro Ser Leu His Ile His His His Lys Gln Thr  
50 55 60

Tyr Thr Phe Gln Lys Leu Val Pro Phe Trp Pro Pro Phe Asn Asn Arg  
65 70 75 80

<210> 179

<211> 40

<212> PRT

<213> Homo sapiens

<400> 179

Met	Arg	Val	Trp	Asp	Pro	Phe	Leu	Thr	Leu	Ile	Leu	Ile	Lys	Gln	Gln
1				5					10					15	

Ile Phe Ile Ile Asn Glu Ile Tyr Asn Tyr Val Asn Leu Ile Asp Ile  
           20                   25                   30

Gly Ile Val Ser Arg Ile Phe Ile  
35 40

<210> 180

<211> 82

<212> PRT

<213> Homo sapiens

<400> 180

Met Arg Tyr Thr Arg Gly Arg Arg Pro Lys Arg Arg Tyr Ile Gly His  
 1 5 10 15

Leu Pro Val Phe Phe Gln Val His Phe Leu Pro Phe Ser Ala Leu Cys  
20 25 30

Tyr Asn Ser Glu Thr Asn Ile Phe Gln Leu Ser Cys Phe Leu Asp Phe  
           35                  40                           45

Lys Lys Ala Ser Glu Arg His Cys Gly Lys Pro Lys Gly Pro Met Trp  
       50                  55                  60

Lys Gln Ala Thr Phe His Leu Leu Arg Leu Ser Ala Ser Ser Ser Ile  
65 70 75 80

Cys Ser

<210> 181  
<211> 23  
<212> PRT  
<213> Homo sapiens

<400> 181  
Met Asp Val Ile Asp Val Pro Lys Glu Ser Val Leu Asn Leu Ile Gln  
1 5 10 15  
  
Ser Pro Gly Ser Ser Cys Leu  
20

<210> 182  
<211> 95  
<212> PRT  
<213> Homo sapiens

<400> 182  
Met Arg Ser Ala Glu Lys Glu Arg Glu Glu Asn Thr Asn Lys Ser Leu  
1 5 10 15  
  
Ser Ser Leu Ser Pro Val Ser Phe Pro Gln His Val Lys Gly Pro Gly  
20 25 30  
  
Pro Lys Phe Pro Leu Pro Cys Val Leu Glu Ala Leu Leu Leu Phe Asn  
35 40 45  
  
Leu Asp Thr Leu Lys Arg Glu Ala Gln Asn Thr Val Thr Val Leu Asn  
50 55 60  
  
Ser Lys Pro Cys His Val Thr Ser Leu His Thr Gly Leu Ala Glu Thr  
65 70 75 80  
  
Ser Val Gly Lys Gly Ala Ala Glu Asn Ser Val Lys Arg Lys Gln  
85 90 95

<210> 183  
<211> 31  
<212> PRT  
<213> Homo sapiens

<400> 183  
Met Arg Asn Leu Met Trp Gly Ile Arg Glu Arg Ile Lys Ser Asp Phe  
1 5 10 15

Arg Val Phe Gly Val Ser Ile Trp Lys Ser Glu Val Ala Ile His  
20 25 30

<210> 184  
<211> 54  
<212> PRT  
<213> Homo sapiens

<400> 184  
Met Ser Phe Pro Thr Lys Gln Phe Gly Val Thr Thr Val Ile Pro Val  
1 5 10 15

Ser Tyr Gly Trp Gly Leu Cys Ile Gly Met Cys Thr Leu Lys Phe Ile  
20 25 30

His Leu Phe Ser Thr Ile Leu Phe Glu His Leu Leu Ser Val Arg Ala  
35 40 45

Leu Ser Val Val Arg Tyr  
50

<210> 185  
<211> 13  
<212> PRT  
<213> Homo sapiens

<400> 185  
Met Lys Arg Glu Leu Ser Ile Leu Ile Lys Ser Lys Gly  
1 5 10

<210> 186  
<211> 51  
<212> PRT  
<213> Homo sapiens

<400> 186  
Lys Ile Gln Ala Lys Gln Ile Lys Lys Arg Ile Gln Arg Ile Ile His  
1 5 10 15

His Asp Gln Val Gly Phe Ile Pro Gly Ile Gln Gly Trp Phe Asn Ile  
20 25 30

Ala Lys Ser Ile Asp Glu Thr His Lys Ile Glu Arg Ile Lys Met Arg  
35 40 45

Ser Leu Met

50

<210> 187

<211> 14

<212> PRT

<213> Homo sapiens

<400> 187

Met Lys Gly Ser Tyr Leu Ile Pro Asn Phe Leu Leu Glu Pro  
1 5 10

<210> 188

<211> 56

<212> PRT

<213> Homo sapiens

<400> 188

Met Asp Val Ser Ala Cys Gly Arg Leu Tyr Phe Ser Lys Met Thr Thr  
1 5 10 15

Lys Ile Ser Pro Ile Ser Cys Val Ile Leu Gln Trp Gly Leu Cys Pro  
20 25 30

Leu Phe Leu Asn Val Cys Ala Leu Val Thr Ala Leu Thr Asn Arg Val  
35 40 45

Trp Gly Arg Met Pro Cys Asp Phe  
50 55

<210> 189

<211> 29

<212> PRT

<213> Homo sapiens

<400> 189

Met Ala Leu Lys Arg Ile Val Ser His Ser Thr Arg Glu Gly Gly Thr  
1 5 10 15

His Leu Glu Arg Cys His Arg Thr Pro Ile Pro Ser Gly  
20 25

<210> 190

<211> 34

<212> PRT  
<213> Homo sapiens

<400> 190  
Met Thr Lys Pro Pro Ile Leu Thr Pro Trp Ser Leu Leu Ser Arg Ser  
1 5 10 15  
  
Pro Leu Cys Ser Phe Gln Ser His Glu Glu Gly Glu Arg Pro Arg  
20 25 30  
  
Gln Gly

<210> 191  
<211> 42  
<212> PRT  
<213> Homo sapiens

<400> 191  
Met Pro Glu Ala Leu Pro Gly Pro Gly Arg Ile Lys Ser Leu Thr Val  
1 5 10 15  
  
Trp Gly Leu Val Trp Pro Phe Thr His Ile Thr Leu Gln Asn Thr Phe  
20 25 30  
  
Gln Gly Asp Ile Ser Val Ser Ser Ile Leu  
35 40

<210> 192  
<211> 59  
<212> PRT  
<213> Homo sapiens

<400> 192  
Met Val Gly His Lys Cys Leu Phe Asn Phe Asp Leu Leu Ala Phe Ser  
1 5 10 15  
  
Ile Gln Ala Val Thr Leu Pro His Lys Thr Leu Gly Ala Leu Ala Arg  
20 25 30  
  
Gly Asp Cys Thr Ser Ser Pro Gln Met Phe Ser Lys Lys Leu Pro Gly  
35 40 45  
  
Thr Leu Leu Leu Gly Tyr Thr Lys Ser Arg Gln  
50 55

<210> 193  
<211> 87  
<212> PRT  
<213> Homo sapiens

<400> 193  
Arg Gln Cys Leu Ala Leu Ser Pro Arg Leu Glu Cys Ser Gly Thr Ile  
1 5 10 15

Ala Ala His Cys Asn Pro Arg Leu Pro Gly Ser Ser Asp Ser Tyr Ala  
20 25 30

Ser Ala Ser Arg Ala Ala Gly Ile Thr Asp Ala His Gln Asp Thr Gln  
35 40 45

Pro Ile Phe Val Phe Leu Val Glu Met Gly Leu His His Val Cys Gln  
50 55 60

Ala Gly Leu Glu Leu Leu Thr Ser Ser Asp Leu Pro Thr Leu Ala Ser  
65 70 75 80

Gln Val Leu Gly Leu Gln Ala  
85

<210> 194  
<211> 117  
<212> PRT  
<213> Homo sapiens

<220>  
<221> UNSURE  
<222> (34)..(72)

<220>  
<221> UNSURE  
<222> (102)

<220>  
<221> UNSURE  
<222> (113)

<400> 194  
Met Gly Lys Ala Leu Phe Cys Gly Leu Trp Pro Leu Lys Ser Ile Cys  
1 5 10 15

Leu Leu Leu Leu Ser Gln Gly Ser Asp Ala Ala Leu Thr Ile Leu Leu

20 25 30

Pro Xaa  
35 40 45

Xaa  
50 55 60

Xaa Xaa Xaa Xaa Xaa Xaa Xaa Leu Val Lys Cys Thr Glu Ala Cys  
65 70 75 80

Ile Phe Glu Thr Ser Lys Gly Arg Arg Leu Arg Arg Ser Pro Leu Gln  
85 90 95

Gly His Leu His Leu Xaa Tyr Val Ala Phe Pro Ser Asn Asn Glu Ala  
100 105 110

Xaa His Trp Val Leu  
115

<210> 195

<211> 47

<212> PRT

<213> Homo sapiens

<400> 195

Met Trp Val Ala Val Pro Asp Phe Pro Leu Leu Pro Ala Val Gly Asp  
1 5 10 15

Glu Leu Leu Ala Leu Gly Pro Asp Phe Pro Gly Trp Pro Leu Arg Ser  
20 25 30

Arg Gly Phe Lys Phe Ser Trp Ser Cys Ser Val Leu Val Gln His  
35 40 45

<210> 196

<211> 34

<212> PRT

<213> Homo sapiens

<400> 196

Met Phe Ser Leu Thr Pro Leu Glu Lys Ser Pro Ser Trp Leu Leu Ser  
1 5 10 15

Gln His Cys Pro Leu Val Ala Cys Ser Pro Trp Cys Phe Leu Ala Val  
20 25 30

Ala Thr

<210> 197

<211> 51

<212> PRT

<213> Homo sapiens

<400> 197

Met Pro Phe Pro Trp Gly Gly Leu Pro Ser Leu Ser Asn Ser Ser Leu  
1 5 10 15

Cys Trp Ser Ser Leu Pro Cys His Ser Thr Leu Ser Phe His Ser Val  
20 25 30

Cys Trp Tyr Cys Lys Tyr Leu Ile Leu Cys Ile Cys Ser Leu Ser Ala  
35 40 45

Ser Ser Gln  
50

<210> 198

<211> 286

<212> PRT

<213> Homo sapiens

<400> 198

Asn Phe Leu Glu Thr Asp Asn Glu Gly Asn Gly Ile Leu Arg Arg Arg  
1 5 10 15

Asp Ile Lys Asn Ala Leu Tyr Gly Phe Asp Ile Pro Leu Thr Pro Arg  
20 25 30

Glu Phe Glu Lys Leu Trp Ala Arg Tyr Asp Thr Glu Gly Lys Gly His  
35 40 45

Ile Thr Tyr Gln Glu Phe Leu Gln Lys Leu Gly Ile Asn Tyr Ser Pro  
50 55 60

Ala Val His Arg Pro Cys Ala Glu Asp Tyr Phe Asn Phe Met Gly His  
65 70 75 80

Phe Thr Lys Pro Gln Gln Leu Gln Glu Met Lys Glu Leu Gln Gln  
85 90 95

Ser Thr Glu Lys Ala Val Ala Ala Arg Asp Lys Leu Met Asp Arg His  
100 105 110

Gln Asp Ile Ser Lys Ala Phe Thr Lys Thr Asp Gln Ser Lys Thr Asn  
115 120 125

Tyr Ile Ser Ile Cys Lys Met Gln Glu Val Leu Glu Glu Cys Gly Cys  
130 135 140

Ser Leu Thr Glu Gly Glu Leu Thr His Leu Leu Asn Ser Trp Gly Val  
145 150 155 160

Ser Arg His Asp Asn Ala Ile Asn Tyr Leu Asp Phe Leu Arg Ala Val  
165 170 175

Glu Asn Ser Lys Ser Thr Gly Ala Gln Pro Lys Glu Lys Glu Glu Ser  
180 185 190

Met Pro Ile Asn Phe Ala Thr Leu Asn Pro Gln Glu Ala Val Arg Lys  
195 200 205

Ile Gln Glu Val Val Glu Ser Ser Gln Leu Ala Leu Ser Thr Ala Phe  
210 215 220

Ser Ala Leu Asp Lys Glu Asp Thr Gly Phe Val Lys Ala Thr Glu Phe  
225 230 235 240

Gly Gln Val Leu Lys Asp Phe Cys Tyr Lys Leu Thr Asp Asn Gln Tyr  
245 250 255

His Tyr Phe Leu Arg Lys Leu Arg Ile His Leu Thr Pro Tyr Ile Asn  
260 265 270

Trp Lys Tyr Phe Leu Gln Asn Phe Ser Cys Phe Leu Glu Glu  
275 280 285

<210> 199  
<211> 64  
<212> PRT  
<213> Homo sapiens

<400> 199  
Met Ser Gln Gln Gly Phe Phe Arg Leu Phe Gly Ile Tyr Ser Leu Pro  
1 5 10 15

Ala Arg Pro Val Asn Ser Ser Arg Phe Ser Val Ser Phe Gln Ile Gly  
20 25 30

Thr Thr Arg Asn His Gln Leu Leu Ser Tyr Thr Leu Asp Met Leu His  
35 40 45

His Phe Asp Val Val Gly Phe Asp Tyr Tyr Lys Ile Asp Pro Asn Tyr  
50 55 60

<210> 200

<211> 35

<212> PRT

<213> Homo sapiens

<400> 200

Met Asn Lys Ile Ser Cys Phe Asn Glu Ala Asn Met Thr Ile Gln Gln  
1 5 10 15

Cys Gly Phe Gly Ile Arg Lys Ile Leu Lys Ile Leu Ile Val Ser Phe  
20 25 30

Ser Leu Pro

35

<210> 201

<211> 66

<212> PRT

<213> Homo sapiens

<400> 201

Met Ser Leu Ile Leu Thr Phe His Leu Leu Leu Thr Arg Gln Ala Leu  
1 5 10 15

Ser Pro Leu Thr Trp Ile Thr Glu Leu Thr Ser Glu Leu Gln Val Val  
20 25 30

Ala Ser Ser Gly Pro Val Pro Ser Val Leu Phe Leu Pro Ala Arg Ile  
35 40 45

Thr Cys Arg Ala Asp Arg Leu Phe Ala His Gly Leu His Lys Ala Ser  
50 55 60

Arg Ala

65

<210> 202  
<211> 27  
<212> PRT  
<213> Homo sapiens

<220>  
<221> UNSURE  
<222> (16)

<220>  
<221> UNSURE  
<222> (20)

<400> 202  
Met Tyr Ala Thr Lys Lys His Val Ser Met Cys Val Asn Leu Lys Xaa  
1 5 10 15

Ile Asn Gly Xaa Phe Trp Glu Val Phe Arg Ser  
20 25

<210> 203  
<211> 47  
<212> PRT  
<213> Homo sapiens

<400> 203  
Met Pro Cys Leu Phe Ser Thr Ser Thr Phe Asn Phe Leu Thr Lys Ile  
1 5 10 15

Lys Cys Tyr Val Phe Ser Lys Ala Asp Leu Leu Pro Ser Ser Leu Ser  
20 25 30

Phe Gly Ser Ser His Tyr Gln His Ser His Pro Pro Thr Leu Lys  
35 40 45

<210> 204  
<211> 19  
<212> PRT  
<213> Homo sapiens

<400> 204  
Met His Gln Ser Val Ser Leu Arg Thr Ala Trp Ala Arg His Gly Trp  
1 5 10 15

Ser Arg Leu

<210> 205  
<211> 22  
<212> PRT  
<213> Homo sapiens

<400> 205  
Met Lys Ile Gln Gly Lys Asn Ile Tyr Asn Thr Thr Met Leu Lys Asp  
1 5 10 15  
  
Pro Phe Phe Tyr Leu Thr  
20

<210> 206  
<211> 29  
<212> PRT  
<213> Homo sapiens

<400> 206  
Met Lys Phe His Ser Asp Pro Ser Cys Val Pro Ser Ile Gln Ile Asn  
1 5 10 15  
  
Lys Arg Asp Tyr Arg Arg Gly Pro Leu Arg Leu Ala Asn  
20 25

<210> 207  
<211> 21  
<212> PRT  
<213> Homo sapiens

<400> 207  
Met Leu Pro Pro Tyr Leu Pro Lys Leu Leu Leu Gln Phe Val Phe Leu  
1 5 10 15  
  
Pro Val Ile Tyr Lys  
20

<210> 208  
<211> 29  
<212> PRT  
<213> Homo sapiens

<400> 208

Met Arg Asn Val Gln Arg Lys Phe Tyr Asn Lys Arg Val Gln Gln Gly  
1 5 10 15

Cys Lys Ile Lys Asp Lys His Ile Asn Ser Ser Cys Ile  
20 25

<210> 209  
<211> 42  
<212> PRT  
<213> Homo sapiens

<400> 209  
Met Glu Leu Pro Leu Phe Ser Leu Ser Cys Ser Tyr Lys Pro Cys Ala  
1 5 10 15

Phe Phe Asp His Ser Thr Ala Thr Ala Ala Leu Val Met Pro Phe Leu  
20 25 30

Ile Ile Pro Gly Ser His Thr Thr Arg Pro  
35 40

<210> 210  
<211> 18  
<212> PRT  
<213> Homo sapiens

<400> 210  
Met Gly Tyr Leu Gly Leu Gly Met Ala Ala Gly Phe Lys Glu Arg Val  
1 5 10 15

Val Glu

<210> 211  
<211> 70  
<212> PRT  
<213> Homo sapiens

<400> 211  
Met Glu Leu Leu Gly Ser Asp Arg Ser Pro Val Ser Phe Leu Ile His  
1 5 10 15

Trp Leu Pro Thr Arg Leu Pro His Gly Val Ser Leu Gly Ser Arg Leu  
20 25 30

Ser Ile Leu Ser Thr Phe Thr Tyr Val Asp Trp Leu Ala Glu Val Ser  
35 40 45

Thr Leu Gly Leu Asp Trp Lys Ile Leu Gln Thr Lys Lys Ala Arg Asp  
50 55 60

Ser Val Pro Pro Thr Ser  
65 70

<210> 212

<211> 44

<212> PRT

<213> Homo sapiens

<400> 212

Met Ala Asp Phe Asn Trp Met Leu Tyr Leu Gly Phe Ser Lys Ala Lys  
1 5 . 10 15

Lys Val Tyr Thr Leu Leu Gln Leu Gly Val Gly Leu Gln Ala Val Cys  
20 25 , 30

Tyr Ile His Val Leu Val Pro Val Ile Leu Thr Phe  
35 40

<210> 213

<211> 71

<212> PRT

<213> Homo sapiens

<220>

<221> UNSURE

<222> (3)

<220>

<221> UNSURE

<222> (14)

<400> 213

Met Cys Xaa Leu Gln Thr Val Tyr Ser Trp Thr Leu Leu Xaa Tyr Phe  
1 5 . 10 15

Asn Pro Ser Asp Asn Leu Cys Ile Leu Ile Arg Phe Leu Asn Pro Phe  
20 25 30

Thr Phe Asn Val Met Phe Asp Ile Ser Trp Ile Tyr Ser Cys His Phe  
35 40 45

Thr Phe Gly Leu Leu Cys Leu Met Tyr Phe Ser Val Leu Leu Phe Leu  
50 55 60

Pro Tyr Cys Phe Leu Leu His  
65 70

<210> 214  
<211> 22  
<212> PRT  
<213> Homo sapiens

<400> 214  
Met Thr Arg Ile Cys Cys Lys Ile His Phe Leu Lys Cys Leu Lys Lys  
1 5 10 15

Glu Met Glu Ile Ser Ser  
20

<210> 215  
<211> 55  
<212> PRT  
<213> Homo sapiens

<400> 215  
Met Phe Ser Met Leu Arg Tyr Cys Tyr Gln Cys Pro Leu Pro Leu Lys  
1 5 10 15

Met Thr Ala Glu Ser Lys His Phe Pro Glu Asn Ser Tyr Thr Gln Ile  
20 25 30

Phe Val Pro Leu Phe Phe Tyr Thr Ala Pro Cys Leu Phe Ile Ser Val  
35 40 45

His Ser Ser Tyr His Met Leu  
50 55

<210> 216  
<211> 49  
<212> PRT  
<213> Homo sapiens

<400> 216  
Met Pro Ser Ala Phe Glu Asn Asp Cys Arg Ile Gln Thr Phe Ser Arg  
1 5 10 15

Lys Leu Leu Tyr Ile Asp Leu Cys Ser Phe Ile Leu Leu His Ser Thr  
20 25 30

Leu Phe Val His Lys Cys Ser Gln Leu Ile Ser His Val Val Ile Met  
35 40 45

Cys

<210> 217

<211> 62

<212> PRT

<213> Homo sapiens

<400> 217

Met Glu Arg Cys Ala Gly Ser Glu Pro Ala Arg Lys Glu Asn Ile Ser  
1 5 10 15

Arg Leu Phe Cys Arg Met Gln Asn Trp Val Tyr Leu Gln Thr Asp Val  
20 25 30

Leu Pro Ser Lys Gly Leu Ala Thr Thr Phe Asp Pro Gln Ser Lys Val  
35 40 45

Asn Thr Ala Ile His Cys Ser Gln Thr Arg Val His Leu Pro  
50 55 60

<210> 218

<211> 29

<212> PRT

<213> Homo sapiens

<400> 218

Met Thr Thr Ser Ser Arg Thr Ile Ile Gly Lys Ile Gln Asp Leu Ser  
1 5 10 15

Val Leu Ser Thr Val Ser Gln Ile Ser Asp Arg Pro Arg  
20 25

<210> 219

<211> 28

<212> PRT

<213> Homo sapiens

<400> 219

Met Gly Phe Tyr His Lys Gly Met Ser Glu Thr Phe Ile Cys Ala Gly  
1 5 10 15

Thr Ser Ala Gln Ser Leu Asn Ala Val Ser Glu Cys  
20 25

<210> 220

<211> 56

<212> PRT

<213> Homo sapiens

<400> 220

Met Phe Ala Ser Glu Phe Phe Leu Val Ile Cys Leu Val Trp Asp  
1 5 10 15

His Val Ala Phe Phe Ser Leu Thr Arg Val Ile Lys Val His Thr Val  
20 25 30

Lys Ser Met Arg Ser Lys Ala Leu Arg Arg Arg Leu Leu Ser Val Asn  
35 40 45

Val Met Ala Gly Ala Ile Arg Leu  
50 55

<210> 221

<211> 97

<212> PRT

<213> Homo sapiens

<400> 221

Arg Ala Arg Ala Glu Ala Ala Arg Ala Arg Gly Glu Val Cys Phe His  
1 5 10 15

Cys Arg Lys Pro Gly His Gly Ile Ala Asp Cys Pro Ala Ala Leu Glu  
20 25 30

Asn Gln Asp Met Gly Thr Gly Ile Cys Tyr Arg Cys Gly Ser Thr Glu  
35 40 45

His Glu Ile Thr Lys Cys Lys Ala Lys Val Asp Pro Ala Leu Gly Glu  
50 55 60

Phe Pro Phe Ala Lys Cys Phe Val Cys Gly Glu Met Gly His Leu Ser  
65 70 75 80

Arg Ser Cys Pro Asp Asn Pro Lys Gly Leu Tyr Ala Asp Gly Lys Tyr  
85 90 95

Cys

<210> 222

<211> 36

<212> PRT

<213> Homo sapiens

<220>

<221> UNSURE

<222> (30)

<220>

<221> UNSURE

<222> (33)

<400> 222

Met Ser Glu Ala Ser Leu Ser Leu Lys Glu Gln Lys Phe Cys His Pro  
1 5 10 15

Val Val Leu Tyr Asn Leu Glu Asn Pro Leu Asn Leu Thr Xaa Leu Gln  
20 25 30

Xaa Tyr Leu Leu

35

<210> 223

<211> 65

<212> PRT

<213> Homo sapiens

<400> 223

Met Leu Cys Gly Val Leu Cys Trp Gly Trp Gly Cys Gln Asp Glu Lys  
1 5 10 15

Gln Pro Cys Gly Cys Ala Leu Gly Phe Thr Ser Gln Thr Ser Val Ala  
20 25 30

Phe Ala Arg Arg Lys Asp Ser Gln Gly Leu His Ile Cys Cys Pro Gln  
35 40 45

Phe Cys Pro Phe Ser Asn Lys Ser His Thr Ser Asn Leu Leu Val Ala  
50 55 60

His

65

<210> 224

<211> 804

<212> PRT

<213> Homo sapiens

<400> 224

Ala Lys Pro Leu Thr Asp Gln Glu Lys Arg Arg Gln Ile Ser Ile Arg  
1 5 10 15

Gly Ile Val Gly Val Glu Asn Val Ala Glu Leu Lys Lys Ser Phe Asn  
20 25 30

Arg His Leu His Phe Thr Leu Val Lys Asp Arg Asn Val Ala Thr Thr  
35 40 45

Arg Asp Tyr Tyr Phe Ala Leu Ala His Thr Val Arg Asp His Leu Val  
50 55 60

Gly Arg Trp Ile Arg Thr Gln Gln His Tyr Tyr Asp Lys Cys Pro Lys  
65 70 75 80

Arg Val Tyr Tyr Leu Ser Leu Glu Phe Tyr Met Gly Arg Thr Leu Gln  
85 90 95

Asn Thr Met Ile Asn Leu Gly Leu Gln Asn Ala Cys Asp Glu Ala Ile  
100 105 110

Tyr Gln Leu Gly Leu Asp Ile Glu Glu Leu Glu Ile Glu Glu Asp  
115 120 125

Ala Gly Leu Gly Asn Gly Gly Leu Gly Arg Leu Ala Ala Cys Phe Leu  
130 135 140

Asp Ser Met Ala Thr Leu Gly Leu Ala Ala Tyr Gly Tyr Gly Ile Arg  
145 150 155 160

Tyr Glu Tyr Gly Ile Phe Asn Gln Lys Ile Arg Asp Gly Trp Gln Val  
165 170 175

Glu Glu Ala Asp Asp Trp Leu Arg Tyr Gly Asn Pro Trp Glu Lys Ser  
180 185 190

Arg Pro Glu Phe Met Leu Pro Val His Phe Tyr Gly Lys Val Glu His

195

200

205

Thr Asn Thr Gly Thr Lys Trp Ile Asp Thr Gln Val Val Leu Ala Leu  
 210 215 220

Pro Tyr Asp Thr Pro Val Pro Gly Tyr Met Asn Asn Thr Val Asn Thr  
 225 230 235 240

Met Arg Leu Trp Ser Ala Arg Ala Pro Asn Asp Phe Asn Leu Arg Asp  
 245 250 255

Phe Asn Val Gly Asp Tyr Ile Gln Ala Val Leu Asp Arg Asn Leu Ala  
 260 265 270

Glu Asn Ile Ser Arg Val Leu Tyr Pro Asn Asp Asn Val Ala Ile Gln  
 275 280 285

Leu Asn Asp Thr His Pro Ala Leu Ala Ile Pro Glu Leu Met Arg Ile  
 290 295 300

Phe Val Asp Ile Glu Lys Leu Pro Trp Ser Lys Ala Trp Glu Leu Thr  
 305 310 315 320

Gln Lys Thr Phe Ala Tyr Thr Asn His Thr Val Leu Pro Glu Ala Leu  
 325 330 335

Glu Arg Trp Pro Val Asp Leu Val Glu Lys Leu Leu Pro Arg His Leu  
 340 345 350

Glu Ile Ile Tyr Glu Ile Asn Gln Lys His Leu Asp Arg Ile Val Ala  
 355 360 365

Leu Phe Pro Lys Asp Val Asp Arg Leu Arg Arg Met Ser Leu Ile Glu  
 370 375 380

Glu Glu Gly Ser Lys Arg Ile Asn Met Ala His Leu Cys Ile Val Gly  
 385 390 395 400

Ser His Ala Val Asn Gly Val Ala Lys Ile His Ser Asp Ile Val Lys  
 405 410 415

Thr Lys Val Phe Lys Asp Phe Ser Glu Leu Glu Pro Asp Lys Phe Gln  
 420 425 430

Asn Lys Thr Asn Gly Ile Thr Pro Arg Arg Trp Leu Leu Cys Asn  
 435 440 445

Pro Gly Leu Ala Glu Leu Ile Ala Glu Lys Ile Gly Glu Asp Tyr Val

450

455

460

Lys Asp Leu Ser Gln Leu Thr Lys Leu His Ser Phe Leu Gly Asp Asp  
465 470 475 480

Val Phe Leu Arg Glu Leu Ala Lys Val Lys Gln Glu Asn Lys Leu Lys  
485 490 495

Phe Ser Gln Phe Leu Glu Thr Glu Tyr Lys Val Lys Ile Asn Pro Ser  
500 505 510

Ser Met Phe Asp Val Gln Val Lys Arg Ile His Glu Tyr Lys Arg Gln  
515 520 525

Leu Leu Asn Cys Leu His Val Ile Thr Met Tyr Asn Arg Ile Lys Lys  
530 535 540

Asp Pro Lys Lys Leu Phe Val Pro Arg Thr Val Ile Ile Gly Gly Lys  
545 550 555 560

Ala Ala Pro Gly Tyr His Met Ala Lys Met Ile Ile Lys Leu Ile Thr  
565 570 575

Ser Val Ala Asp Val Val Asn Asn Asp Pro Met Val Gly Ser Lys Leu  
580 585 590

Lys Val Ile Phe Leu Glu Asn Tyr Arg Val Ser Leu Ala Glu Lys Val  
595 600 605

Ile Pro Ala Thr Asp Leu Ser Glu Gln Ile Ser Thr Ala Gly Thr Glu  
610 615 620

Ala Ser Gly Thr Gly Asn Met Lys Phe Met Leu Asn Gly Ala Leu Thr  
625 630 635 640

Ile Gly Thr Met Asp Gly Ala Asn Val Glu Met Ala Glu Glu Ala Gly  
645 650 655

Glu Glu Asn Leu Phe Ile Phe Gly Met Arg Ile Asp Asp Val Ala Ala  
660 665 670

Leu Asp Lys Lys Gly Tyr Glu Ala Lys Glu Tyr Tyr Glu Ala Leu Pro  
675 680 685

Glu Leu Lys Leu Val Ile Asp Gln Ile Asp Asn Gly Phe Phe Ser Pro  
690 695 700

Lys Gln Pro Asp Leu Phe Lys Asp Ile Ile Asn Met Leu Phe Tyr His

705 . . . . . 710 . . . . . 715 . . . . . 720

Asp Arg Phe Lys Val Phe Ala Asp Tyr Glu Ala Tyr Val Lys Cys Gln  
725 . . . . . 730 . . . . . 735

Asp Lys Val Ser Gln Leu Tyr Met Asn Pro Lys Ala Trp Asn Thr Met  
740 . . . . . 745 . . . . . 750

Val Leu Lys Asn Ile Ala Ala Ser Gly Lys Phe Ser Ser Asp Arg Thr  
755 . . . . . 760 . . . . . 765

Ile Lys Glu Tyr Ala Gln Asn Ile Trp Asn Val Glu Pro Ser Asp Leu  
770 . . . . . 775 . . . . . 780

Lys Ile Ser Leu Ser Asn Glu Ser Asn Lys Val Asn Gly Asn Asn Lys  
785 . . . . . 790 . . . . . 795 . . . . . 800

Val Asn Gly Asn

<210> 225

<211> 60

<212> PRT

<213> Homo sapiens

<400> 225

Met Gly Asp Leu Tyr Lys Glu Leu Lys Lys Arg Arg Asn Val Ile  
1 . . . . . 5 . . . . . 10 . . . . . 15

Ser Met Leu Leu Gln Val Lys Gly Lys Gln Glu Asp Lys Tyr His Lys  
20 . . . . . 25 . . . . . 30

Lys Thr Lys Met Tyr Leu Thr Phe Trp Asp Lys Ile Val Gly Ser Thr  
35 . . . . . 40 . . . . . 45

Glu Asn Trp Asn Leu Glu Leu Pro Val Pro Gln Arg  
50 . . . . . 55 . . . . . 60

<210> 226

<211> 46

<212> PRT

<213> Homo sapiens

<400> 226

Met Phe Tyr Glu Tyr Lys Glu Tyr Asn Glu Cys Tyr Tyr Lys Tyr Ile  
1 . . . . . 5 . . . . . 10 . . . . . 15

His Ala Asn Arg Asp Phe Gln Tyr Pro Thr Phe Ser Gln Phe Arg Leu  
20 25 30

Pro Glu Ile Gly Leu Leu Gly Gln Arg Leu Gln Thr Tyr Phe  
35 40 45

<210> 227

<211> 13

<212> PRT

<213> Homo sapiens

<400> 227

Met Arg Arg Trp Tyr Ile Trp Glu Val Ser Arg Gly Tyr  
1 5 10

<210> 228

<211> 27

<212> PRT

<213> Homo sapiens

<400> 228

Met Phe Leu Arg Tyr Leu Gly Lys Ser Ser Glu Pro Cys Val Ala Asn  
1 5 10 15

Gly Asn Ala Val Val Gln Trp Gly Leu Leu Gly  
20 25

<210> 229

<211> 45

<212> PRT

<213> Homo sapiens

<400> 229

Met Ala Thr Asn Ser Cys Leu Tyr Ser Thr His Lys Gln Phe Gln Tyr  
1 5 10 15

Met Phe Cys Asp Arg Ser Pro Lys Ile Ser Ser Phe Met Val Pro Gly  
20 25 30

Arg Thr Glu Asn Ser Arg Met Gln Leu Leu Lys Leu Phe  
35 40 45

<210> 230

<211> 96  
<212> PRT  
<213> Homo sapiens

<400> 230

Lys	Arg	Gln	Gly	Leu	Ala	Leu	Ser	Pro	Arg	Leu	Glu	Tyr	Asn	Asp	Val
1				5			10						15		
Ile	Ile	Ala	His	Arg	Asn	Phe	Glu	Leu	Pro	Gly	Ser	Ser	Asn	Pro	Ser
						20		25					30		
Ala	Ser	Ala	Ser	Gln	Glu	Leu	Gly	Leu	Gln	Thr	Cys	Ala	Thr	Thr	Ser
							35		40			45			
Ser	Phe	Phe	Ile	Phe	Cys	Arg	Gly	Arg	Val	Ser	Leu	Cys	Cys	Pro	Gly
						50		55			60				
Gly	Val	Ser	His	Ser	Thr	Ser	Ser	Asn	Pro	Thr	Ala	Ser	Ala	Ser	Gln
						65		70		75			80		
Arg	Ala	Arg	Ile	Thr	Gly	Leu	Ser	His	Cys	Thr	Gln	Pro	Lys	Ala	Leu
							85		90			95			

<210> 231  
<211> 56  
<212> PRT  
<213> Homo sapiens

<400> 231

Met	Leu	Ala	Leu	Ser	His	Trp	Thr	Val	Val	Pro	Ser	His	Pro	Leu	Ser
1						5			10			15			
Pro	Ser	Leu	Asp	His	Glu	His	Ser	Arg	Ala	Arg	Thr	Thr	Ser	Val	Leu
							20		25			30			
Phe	Thr	Ala	Val	His	Pro	Ala	Leu	Thr	Gln	Cys	Leu	Met	His	Ala	Leu
							35		40			45			
Gly	Ala	Gln	Glu	Val	Leu	Ile	Gln								
						50		55							

<210> 232  
<211> 34

<212> PRT  
<213> Homo sapiens

<400> 232  
Met Asp Ser Pro Lys Arg Val Ser Ser Asp Leu Ser Leu Leu Arg Asn  
1 5 10 15  
  
Lys Ile Leu Asp Ser Gly Cys Val Cys Phe Arg Cys Cys Gly Thr Gly  
20 25 30  
  
Trp Phe

L  
G  
G  
G  
G  
S  
E  
S  
S  
I  
I  
E  
T  
C  
E  
F  
  
<210> 233  
<211> 34  
<212> PRT  
<213> Homo sapiens

<400> 233  
Met Leu Ser Ala Phe Phe Thr Leu Ile Leu Ser Pro Val Tyr Arg Arg  
1 5 10 15  
  
Val Phe Gln Arg Leu His Met Arg Tyr Leu Asn Lys Leu Lys Ala Glu  
20 25 30  
  
Glu Ile

<210> 234  
<211> 35  
<212> PRT  
<213> Homo sapiens

<400> 234  
Met Cys Phe Glu Thr Gly Glu Tyr Ser Trp Ser Gly Ala Gly Ala Gln  
1 5 10 15  
  
Asn Thr Arg Phe Leu Cys Ser Asp Asn Leu Cys Ser Leu Ala Leu Leu  
20 25 30  
  
Leu Ile Tyr  
35

<210> 235  
<211> 40

<212> PRT

<213> Homo sapiens

<400> 235

Met Ile Asn Glu Gln Met Asn Ile Ser Glu Lys Leu Val Tyr Ile Ile  
1 5 10 15

Met Asn Arg Leu Val Leu His Phe Tyr Lys Asn Arg Lys Leu Lys Ile  
20 25 30

Lys Lys Lys Ile Leu Pro Lys Lys  
35 40

<210> 236

<211> 60

<212> PRT

<213> Homo sapiens

<400> 236

Met Tyr Lys Cys Leu Leu Glu Ala His Glu Val Tyr Arg Trp Phe Leu  
1 5 10 15

Pro Gln Tyr Leu Thr Ile Val Lys Phe Gln Ala Met Pro Leu Leu Ser  
20 25 30

Thr Thr Phe Ser Leu Arg Ser Thr Gly Ile Trp Leu Arg Phe His Ser  
35 40 45

Asp Asp Leu Leu Ser Glu Thr Leu Arg Leu Glu Lys  
50 55 60

<210> 237

<211> 36

<212> PRT

<213> Homo sapiens

<400> 237

Met Ser Leu Tyr Leu Phe Ser Pro Phe His Cys Pro Phe Phe Pro  
1 5 10 15

His Leu Pro Leu Cys Ser Val Leu Ser Leu Ala Ser Ser Cys Gln Tyr  
20 25 30

Val Asp Phe Cys  
35

<210> 238  
<211> 66  
<212> PRT  
<213> Homo sapiens

<400> 238  
Met Phe Phe Tyr Leu Ser Lys Thr Leu Pro Met Phe Leu Leu Lys His  
1 5 10 15

His Ser Tyr Ser Lys Thr Lys Val Asn Glu Asn Leu Tyr Gln Asp Asp  
20 25 30

Cys Pro Gln Ser Ser Gly Trp Thr Thr Cys Leu Ser Ser Ile Ile Leu  
35 40 45

Cys Ile Ile Ser Leu Ile His Ser Asn Ser Leu Cys Ile Ile Cys Ala  
50 55 60

Ser Gly  
65

<210> 239  
<211> 31  
<212> PRT  
<213> Homo sapiens

<400> 239  
Met Cys His Gly Phe Val Thr Pro Tyr Tyr Tyr Tyr Leu Ser Leu Ala  
1 5 10 15

Ser Cys Tyr Cys Pro Tyr Leu Thr Thr Ile Thr Ser Met Ser Ser  
20 25 30

<210> 240  
<211> 44  
<212> PRT  
<213> Homo sapiens

<400> 240  
Met Asn Asn Ile Ile Pro Leu Leu Ile Leu Met Gly Leu Phe Phe Leu  
1 5 10 15

Ser Gln Ser Ala Leu Ile His Ile Gly Ser Leu Asn Ser Ser Asn Ile  
20 25 30

Ile Lys Ser Phe Ser Pro Arg Asp Pro Thr Phe Arg  
35                          40

110